

THE TECHNOLOGY REVIEW

• RELATING • TO • THE • MASSA-
• CHUSETTS • INSTITUTE •
• OF • TECHNOLOGY •



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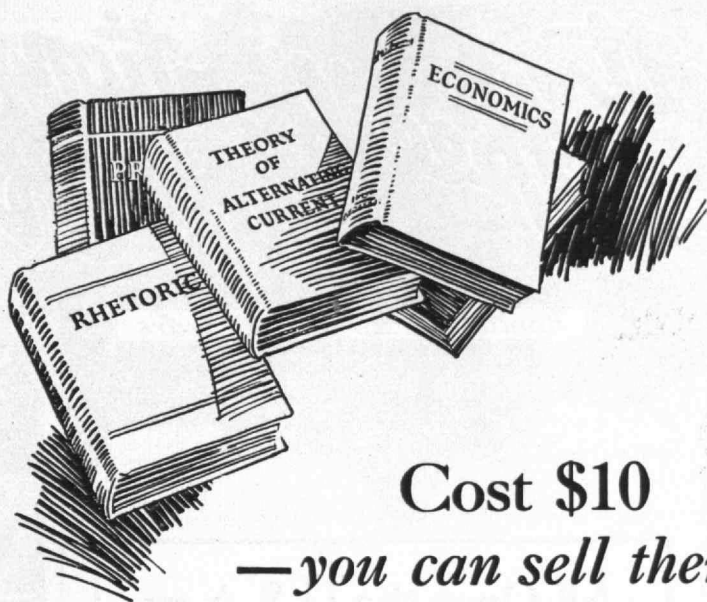
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THE TECHNOLOGY REVIEW

RELATING TO THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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The Life of Francis Amasa Walker

Third President of the Massachusetts Institute of Technology

By James Phinney Munroe



GENERAL WALKER was eminent as a soldier, a statistician, an economist, an administrator, an educator, and, above all, as a man.

He was born in 1840, graduated at Amherst in 1860, fought through the Civil War and was breveted Brigadier General at twenty-five; was Superintendent of the Census at twenty-nine, Commissioner of Indian Affairs at thirty, Professor in Yale at thirty-one, President of the Massachusetts Institute of Technology at forty-one, and died at fifty-seven.

His first book, on the Wages Question, published in 1877, at once attracted the attention of economists, and was made part of the curriculum at Oxford. His Political Economy, published in 1883, marked him as the leading economist of America, if not of his time. He was the first President of the American Economic Association, and filled many other posts of usefulness and honor.

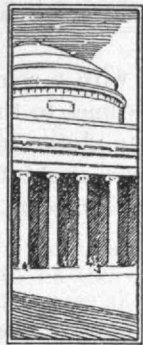


Partly because his family felt that no man's biography should be written until his life work has been before the world for twenty-five years, the present biography is but just ready. Its author was Secretary of the Faculty of the Institute of Technology during a large part of President Walker's administration.

The extracts from the author's Civil War reminiscences and letters meet a wide and undying interest; the accounts of his activities as a statistician, economist and educator are of very exceptional value to all associated with these pursuits; the chapters on the Institute must be of great interest, not only to all Technology Alumni, but also to every undergraduate who finds daily satisfaction in the use of the Walker Memorial; and the book as a whole appeals to all who find entertainment and instruction in reading exemplary biography.

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THE TECHNOLOGY REVIEW

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY



The Past Month

THE past month has seen an unusual number of Technology professors lecturing on platforms exterior to the Institute. Dr. Stratton, during the month, was an easy winner in the matter of the most speaking hours, having been forced into a speaking program of size more characteristic of presidents before their election than after. One of the most important of Dr. Stratton's engagements during January was the address given before several hundred members of the Boston Chamber of Commerce and more than one hundred women visitors in the galleries at the Copley-Plaza on January 25.

President Snyder of the Chamber presided and introduced Dr. Stratton. Then, says the Boston Transcript, "Much to the surprise of many who were not graduates of the Institute, a genuine Tech cheer was given without a flaw and with tremendous volume by what seemed to be every man in the ballroom." Dr. Stratton spoke on "The Laboratory and Industry."

Dr. Stratton was likewise a speaker at the dinner of the Technology Club of New Hampshire on Friday, February 2.

Exclusive of Dr. Stratton the extensive program reads in part as follows:

Waldemar Lindgren, Professor of Geology, on "The

Geology of Bolivia," in Hopkins Hall at Yale University.

Willard E. Freeland, Assistant Professor of Marketing, on "Master Planning," before the New England section of the Taylor Society.

William Lyman Underwood, Lecturer in Biology and Public Health, on "Wild Brothers," before the Wellesley Hills Club.

C. Howard Walker, Lecturer in Architecture, on "Architecture as an Art," at Colorado College, as far away as Colorado Springs.

And of course the Review's Contributing Editor toured his usual Chataquas and delivered lectures on the "Drama League" in Worcester and other somewhat lesser places. All in all, a full month.

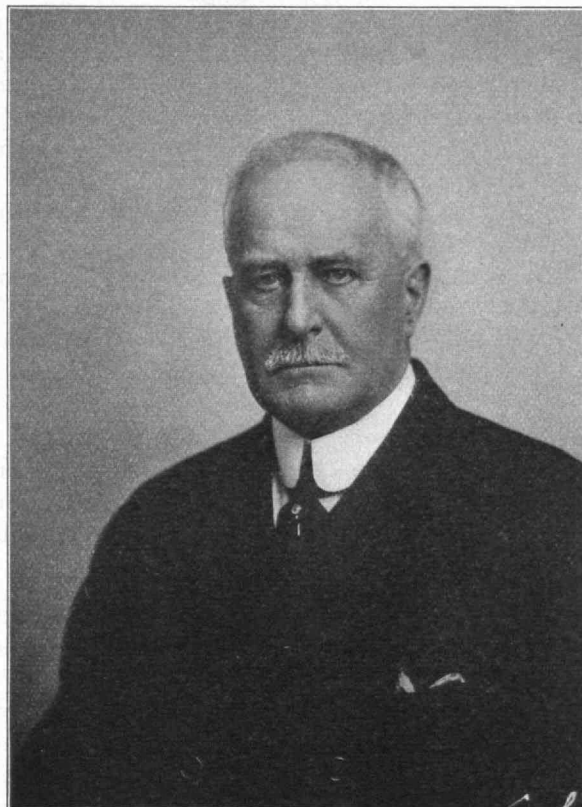


Photo by Notman

JAMES W. ROLLINS, '78

Chairman of the Alumni Council's recently appointed Committee on Dormitories. Mr. Rollins is the President of the Holbrook, Cabot and Rollins Corporation, Structural Engineers

A RECENT announcement from the American Scandinavian Foundation of New York was made to the effect that in April the Foundation will award to students of American birth, twenty fellowships for study in the Scandinavian countries, during the academic year 1923-24. These fellowships, ten for study in Sweden, and five each for study in

Denmark and Norway, will bear stipends of at least \$1,000.

It is announced that all applicants from any one

university, college or institute will present their applications and supporting papers some time before March 1st to the President of their institution or to another official designated by him. These papers will then be considered by the scholarship committee of the college, or some other official committee, which will pass upon the candidates, rate them in the order of merit and forward their nominations to the Foundation. Men who are not college graduates or men who are college graduates not asking for official recommendation from their college may apply direct.

The jury which are to make the final selection for the Foundation is composed of a number of university professors and technical experts. The Chairman of this committee is Prof. William Hovgaard of the Department of Naval Architecture and Marine Engineering at the Institute.

ORDINARILY one thinks records for consecutive performances as being held by members of the theatrical profession. A recent occurrence at Technology proved the error. Prof. Augustus H. Gill missed a class in January, thereby making the second break in his continuity of attendance since the year 1893. Professor Gill is one of the senior members of the Department of Chemistry and likewise a former Secretary of the Alumni Association. His January absence was his first since 1911, during which year, in deference to an insistent appendix, he remained absent from the Institute for several weeks. Between this time in 1911 and the year 1893 previously cited, he had never failed to meet a class for which he was scheduled. Professor Gill's absence this decade must have caused him much grief. Everyone will sympathize with him in his disaster and be glad only that it was the means of bringing to light an achievement which otherwise might have passed unnoticed.

NOT many months ago, The Review had the opportunity of printing an article by Willis R. Whitney, '90, titled "'G. Swope, Helper,'" in which were set forth certain facts about the member of the Class of '95 who had then just become the new President of the General Electric Company. On February 8, the Faculty Club had the opportunity of hearing Mr. Swope, himself, and of learning why that simple title of Helper is still so remarkably appropriate. After listening to him for half an hour, one takes the impression that there are few matters upon which he could not qualify to help, to say nothing of lead. At this Faculty Club luncheon, Mr. Swope spoke briefly but comprehensively concerning some of his own problems, and educational problems that were allied to them. His discourse was plain—by which we do not mean that it was either heavy or unforceful. He talks

with emphasis, skill and wit, yet always with a complete avoidance of oratory. The listener comes to the conclusion that Mr. Swope is speaking to clothe his thoughts, not to conceal them. "Someone ought to take that down," the listener thinks, "That's *wisdom*." Thus it seemed to the Faculty.

BY now, Dr. Stratton really has surely met everybody. When the Review, last month, made a similar statement, it did not realize that the Alumnae were then un-introduced. The introduction took place on January 26, in the North Hall of Walker Memorial at a luncheon held by the "M. I. T. Women's Association." Dr. Stratton was a speaker, as was Dr. James P. Munroe, '82, Secretary of the Corporation, and Dr. Alice F. Blood, '03, Associate Professor of Household Economics at Simmons College.

RECOMMENDATIONS for the award of 104 Bachelor of Science degrees, 14 Master of Science degrees, and one Doctor of Science degree were presented and approved at the last meeting of the Corporation. Diplomas are now being sent to those who have satisfactorily completed their courses since commencement exercises last June, having finished their work either during the summer or the past term.

More Bachelor degrees were given in the Department of Mechanical Engineering than in any other, a total of 35 having been awarded in that course. Chemical Engineering came next, with 20; Engineering Administration, 13; Civil Engineering, 7; Architecture, 6; General Engineering, 6; Electrical Engineering, 6; Mining Engineering and Metallurgy, 5; Chemistry, 2; Naval Architecture and Marine Engineering, 2; Geology, 1; Electro-Chemical Engineering, 1.

MAJOR-GENERAL Mason T. Patrick, chief of the army air service, was the principal speaker at a meeting of the Aeronautical Engineering Society of Technology on the evening of January 25, on a program which included Dr. Stratton and Prof. E. P. Warner, '17. General Patrick's address largely concerned the development of aviation in this country and elsewhere since the conclusion of the war, and included reference to the recent efforts in this country aimed at the production of a practical helicopter. Dr. Stratton related some of his experiences as a member of the National Advisory Committee for Aeronautics. Professor Warner spoke on the equipment of commercial airplanes and air ports, and illustrated his words with material gathered on his recent trip to Europe. The substance of his talk appeared in the Review for November, 1922, as an article entitled "Flying Through Europe."

The Annual Alumni Dinner

Telling who Spoke, and what, at the Walker Memorial on January 13

Dominance of the coming era by the engineer seemed to be the major thought of the toastmaster and the three speakers at the annual dinner of the Alumni Association in Walker Memorial on Saturday, January 13. President Harry J. Carlson, '92, the presiding officer, declared that "technically trained men will be the leaders if they are ready;" Mr. Eaton's most interesting discourse fairly teemed with suggestions of engineers manipulating the destinies of such a millenium; President Lowell of Harvard clinched the prediction by coming out flatly with the statement that the "future is with the engineer;" and President Stratton, as the final speaker, gave assurance to those present that the Institute would get Mr. Carlson's leaders ready in ample time. Such beliefs are not new; they have been voiced before, at alumni dinners and elsewhere. It is but natural to suppose that an invited guest should say something of this sort as a compliment to Technology, but the obvious sincerity of the speakers on this occasion left no room for the relegation of their remarks to the pigeon-hole of platitude.

Not in the matter of numbers did this dinner stand out—450 were on hand in spite of the Boston newspapers' claim of 600—but perhaps this was due to the inclemency of the weather that particular evening and the truly arctic accumulation of snow which had been going on for several fortnights preceding. But "Those who are here are those who are interested," President Carlson said truly. It is trite to say that it has been more difficult to conduct a dinner successfully during the past few years. It seems, however, that many alumni are in accord with the management of Keith's Theatres and prefer not to exhibit their grief publicly, but to remain at home.

However, considerable amusement was evoked at the specialty act from Tech Show, in which J. D. Cochran, '23, assisted by Frank Gage, '23, at the piano, sang a melody from "The Wrong Steer" on the order of "Believe me if all those endearing charms, etc.," the former being gowned in accord with the mood of the lyrics. Her gaze first fastened on Major Frank H. Briggs, '81, who became the object of affectionate attention for a whole verse, joining in with the spirit of the chorus by nimbly waltzing a few steps under the obviously jealous gazes of representatives of the classes of '76 to '84, inclusive. Whether it was due to the Major's suggestion or prearranged, we cannot

say, but President Stratton was the only one else who shared honors. He was the object of attention during the final verse. The Glee Club, led by Schuyler Hazard, '23, offered three vocal selections and the "Stein Song," which were well received.

Before introducing the speakers of the evening,

President Carlson renewed the pledge of loyalty by the Alumni to the Institute. He referred to the Alumni Council as a training school for officers of the Association, and as a sifting place to try out such officers; and with this in view, urged that the classes and local associations send their best men to the Council meetings, that trained men might be ready when President Stratton calls on the Alumni to help "put something over." Thirty million dollars of tangible assets, and potential assets of uncounted value represent "this New Technology" of today, with which, he said, all Alumni must keep closely in touch. "How are we going to do all this? There is only one answer—read the Review." Simple, lucid, logical. He made flattering reference to certain portions of the magazine in its new form (reportorial accuracy demands the inclusion of this information, reportorial modesty being completely overshadowed), and seemed to feel that it justified its existence by fulfilling its purpose of



ABBOTT LAWRENCE LOWELL
President of Harvard University and speaker
at Technology's Alumni Dinner
on January 13

service to the Alumni and Technology.

After emphasizing the future pre-eminence of the technically trained man, he defined leaders as "men who forget themselves, who become a part of their cause—to whom success is the one thing sought. A singleness of aim. Such is impossible without character. Are our big men square men or are they rascals? The awakening of the civic conscience was due to Theodore Roosevelt. Would that he were alive and that there were more like him."

"Our problems are before us—dormitories, athletics, financial questions, and many others. There is so much to do and so little time to think. We need the help of all of you."

In introducing the first speaker, Dr. Charles Aubrey Eaton of the General Electric Company, he referred to him as an old friend who came with a sling and smooth pebbles, a man who during the war was associated with Messrs. Pietz and Schwab, the combination being known as the three Charlies, and abroad as "les trois Charlees." Dr. Eaton is Director of Industrial Relations for his company, and his remarks dealt with these problems.

He prefaced his remarks by saying, "I don't know anything about your business and consequently by modern standards am thoroughly qualified to tell you how to run it. We went into the war wrong end to. Shows our lack of engineering training. We had no ships. We thought our boys were amphibious. Some of our boys are ambiguous, as we have seen this evening."

"Well, some of us held a meeting in New York to settle the question by conversation, our usual method. We had naval architects there and others. Josephus was there and showed his usual acquaintance with naval affairs. I had a theory and—in the middle of it Admiral Capps, who was head of the Shipping Board that week, got up and commandeered me, and I had my first government job."

"As a background to any worth-while discussion of the industrial problem," he said, "we must give attention to a great fundamental fact of history. It is: civilization chooses some instrument for its existence. Sometimes this instrument is war. Sometimes it is religion. In the 19th Century it was science. Now there is a new instrument—Industry—where men spend most of their time and where all human relations are coming to a great test."

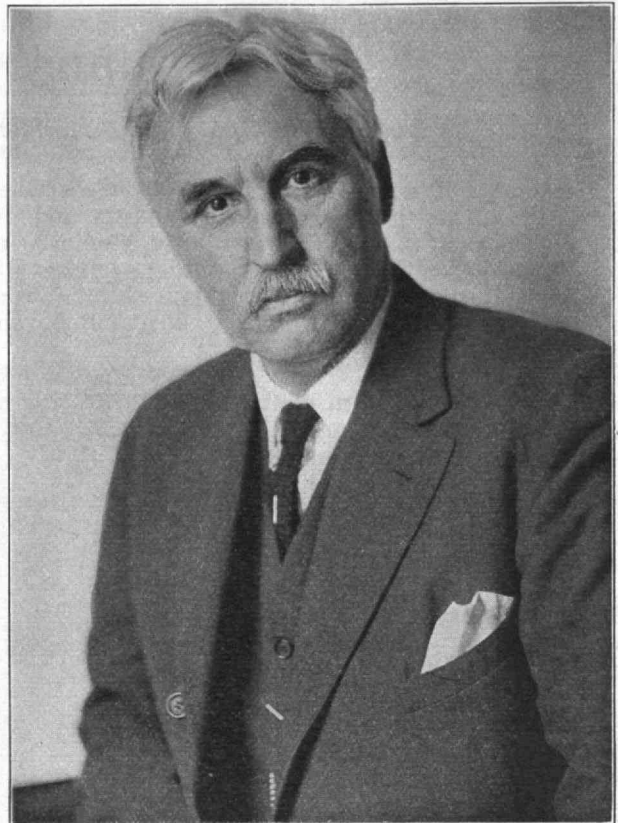
The speaker then analyzed what the employer and employee have in common, showing that much of their joint difficulty is based on the fallacy that their interests are opposed. "The great changeless fact is, that the interests of the employer and employee are identical; they are like two horses hitched to one load which can only be moved by two horses; if one fails, both will fail."

Mr. Eaton was optimistic as to the future development of these relations as both parties were informed of the need, and that what is needed is education to permit America to take its place as "God's chosen child for the days that are to come."

Dr. Eaton, his remarks concluded, retired into his seat, and President Carlson proceeded to the introduction of the second speaker of the evening—President Abbot Lawrence Lowell of Harvard. In greeting to him, the audience rose swiftly to its feet and loudly sang "For he's a jolly good fellow" with spontaneity, if without precision.

After extending to Dr. Stratton the greetings of Harvard University, and personal greeting of his own, President Lowell made his bold declaration that "the future lies with the engineer," and inferred that no man could undertake a greater responsibility than the headship of an institution that set itself to train these men with whom the future lay. Even without this complication, he said to Dr. Stratton, "you have chosen a work that is more full of worry and of opportunity than any other that a man may choose." An optimist, he said, had been defined as a man, who, gazing into the dark cavern of the future, sees a light which is not there; a pessimist as a man who extinguishes that light. "You, carrying on your work in the backwash of the war, must be that optimist. You will never accomplish what you hope. You have the opportunity to build yourself into future generations, yet you may never see the results that you obtain. I can congratulate you, however, on the future. You are the man."

As the applause slackened, Mr. Carlson rose again to his feet. We, he said, whose habitation was upon the banks of the Charles, had come, in the past three years, more nearly to be floating in the middle of it, and without a steersman. That time, he said, turning



CHARLES AUBREY EATON

*Director of Industrial Relations for the General Electric Company
Another speaker at the Alumni Dinner*

to Dr. Stratton, had now gone by. We had our steersman again. The men of Technology who filled the hall rose and cheered in a manner which can have left little room for doubt in the mind of their new President concerning the enthusiasm of the support he is to receive from the Alumni.

Dr. Stratton's speech was simple and brief. Since he had assumed his office precisely eleven days before, it was not to be expected that the Alumni, that evening, would hear word of new and startling policies.

"The process of acclimation is slow," said Dr. Stratton. "I am not yet accustomed to my new surroundings. I have not had time to visit the various departments and to study them. I pass undergraduates upon the street. They are hesitant, and do not know quite what to do. Neither do I."

The new President had known Technology all his life, he said. His first teacher was a Technology man. Throughout his career, he had known many men from the institution he had now come to head, but he had never known one who had fallen down upon the job that had been given him. The insight into the ideals of these men, which Dr. Stratton had previously gained, together with those which, even in his brief association with the Institute, he had newly acquired, were obviously to be the basis upon which Dr. Stratton had determined to build. The Alumni gathering, sensing the power which lay behind his quiet words, cheered itself into the last stages of hoarseness as Dr. Stratton concluded, rose, turned about and broke up until another January should bring another dinner, and they should assemble once again to have recounted to them the progress of the year which now was in the future, faced with hope and pleasure.

Democratic Theory and Internationalism

A Discussion of the Forces determining International Relations of the Present Day

In that illuminating book, "The Letters of Walter H. Page," he declares, concerning a closer alliance of English-speaking peoples: "I see little hope of doing anything so long as we choose to be ruled by an obsolete remark made by George Washington." Later, he refers to the American people as "wallowing in George Washington's feather bed, known as 'the avoiding of entangling alliances.'" The League of Nations, whatever its merits or demerits, was never soberly discussed in the United States Senate; its advantages and disadvantages were never dispassionately looked in the face; and the Treaty which contained the League was finally suffocated under that same old "feather bed."

It is superfluous to tell men of science that if we tried to run things today by the standards of the immortal G. W. we would still be driving chaises over corduroy roads by the light of a tallow candle. In the late 18th Century, Washington's advice was eminently wise; but this is the 20th Century, and the world is a much more interrelated place than when Washington freed the colonies from that insane old German feudalism, George III.

Today, China is closer to us in actual time of transit than were some of the Colonial settlements to the saddle-horse of the First President; while what may happen next moment in Peking will be, within five minutes, broadcasted here. Inventions have practically eliminated terrestrial space; and our concern today with the political volcano of the Near East is far greater than was that of the Government at Washington with the Hartford Convention of 1814, at which it was solemnly proposed that Federalist New England should secede.

Moreover, by the natural progression of world history — greatly accelerated by the World War — the United States has achieved economic world dictatorship. Consequently, whether we like it or not, we are financially bound up with South America, Asia, Africa, Australasia, and particularly, of course, with Europe.

Furthermore, whereas Washington was confronted merely with a democratic theory which nobody put into practice, we are today faced with a lot of democracies in actual existence. Germany calls herself a democracy; England, France, Switzerland, Czecho-

By JAMES P. MUNROE, '82

*Secretary of the Corporation,
M. I. T.*

Slovakia and a few others really are democracies; Italy, I am convinced, is soon to become one; and every component of the Balkan muddle is, or thinks it is, or aspires to be, at least near-democratic. While many of these nations don't know where they are going, they are all actually on their democratic way; and, for our own sake, even more than for theirs, we ought to give them some sort of big-brother help.

The United States did not begin to comprehend real democracy until it got rid of those fusty old fogies, the Federalists; it did not practice democracy, as the phrase is, "till it hurt," until that obstinate campaigner, Andrew Jackson, rammed it down people's throats; and we were not a country-wide democracy until after we had been through the awful trials of the Civil War, until we had outlived the reconstruction period, and, indeed, until Roosevelt, about twenty years ago, had "knocked plutocracy" — which is usually the immediate successor of autocracy — "into a cocked hat."

The final test of our democratic soundness was the World War. We showed then that we were much more democratic than our leaders. If there were some feasible way — and to my mind the referendum is not an effective method — to get us to act directly, instead of through narrow-minded, self-seeking politicians, it would be found that most of us long ago gave Washington's "feather bed" to the chore-man and are willing to do our fair share — merely

as a matter of sound common sense — in straightening out the bewildering tangle of the world.

As I have said, we are confronted with almost world-wide democracy in the making. Kings are tumbling; men on horseback, like Mussolini in Italy and Kemal in Turkey, are coming to the front; and all sorts of radical experiments in government are under way. To an unusual degree, mankind is in the sweep of forces beyond its direct control, forces that, if not guided, so far as they can be, towards construction, may lead to world-wide and perhaps irreparable destruction.

In Washington's time, Europe and Asia might have fallen quite to pieces without seriously affecting our material and political future. Today, the smallest convulsion among those foreign states reacts, directly, upon us. We cannot, if we would, escape "entangling

This article was delivered as a lecture by Mr. Munroe on December 8 and 9 to second-year students taking courses in the Institute's Department of English and History under the direction of Prof. H. G. Pearson. Although the lectures were delivered primarily for the benefit of these students, they were thrown open to the public and aroused considerable interest. The course of which these lectures formed a part aimed to acquaint the students with varying political theories of the 19th and 20th centuries. A complete list of the lectures is as follows:

October 20 and 21. Roscoe Pound, Dean of Harvard Law School.

An Introduction to the Social Sciences.

November 4. J. J. Tigert, United States Commissioner of Education.

Democratic Theory and Education.

November 10 and 11. Rev. W. L. Sperry, Dean of Harvard Theological School.

Democratic Theory and Religion.

November 17 and 18. Andrew J. Peters, Ex-Mayor of Boston.

Democratic Theory and Municipal Government.

November 24 and 25. F. L. Hoffman, Dean of Advanced Course, Babson Institute, and Consulting Statistician of the Prudential Insurance Company.

Democratic Theory and the Government of Industry.

December 1 and 2. R. L. O'Brien, Editor Boston Herald.

Democracy and the Press.

December 8 and 9. James P. Munroe, '82, Former Vice-Chairman of the Federal Board for Vocational Education.

Democratic Theory and Internationalism.

alliances," for the time has long gone by when we had any choice.

Fortunately, the present most powerful nations are also those farthest on the road to democracy. Naming them in order, the Big Five are the United States, the British Isles, France, Italy and Canada. I have omitted Japan because, while her progress, especially as a military power, has been remarkable, she is still too young and we are too ignorant of the Oriental mind for us yet to classify her.

Four of the Big Five are essentially democratic, and, despite the Fascisti or because of the Fascisti (it is difficult to say which), Italy, too, is rapidly qualifying. And as those Big Five set the pace, the rest of the world must eventually follow. How many wars and other convulsions may intervene between our present imperfect attempts at it and a far-extended, genuine democracy, none can safely prophesy; but, through less bloodshed or through more bloodshed, the tide of the world is definitely set in the right direction. If we may judge the future by the past, that democratic sweep will be, from now on, irresistible.

It is not by chance that the Big Five are both big and on the right democratic road. Those Five are the chief industrial countries of the world — now that Germany, by her folly, has put herself out of the running — and democracy is far less an outcome of politics than it is a logical product of enlightened industry. The United States, Canada and Western Europe are the leading industrial regions of the earth; therefore they are also farthest towards democracy. They are farthest towards democracy; therefore they are the Big Five. If Japan is to come in as a Big Sixth, it will be because she develops her industrial and smothers her warlike ambitions; and if, some day, Germany is to be admitted as a Big Seventh, it will be for the reason that she has remained true to her industrial, while utterly repudiating her militaristic, visions of supremacy.

It is because democracy is a question of business rather than of politics that it has made such strides in Great Britain, America and France. It is because, in industrial democracy, the big man is certain to get to the top, it is because industry must go hand in hand with education, and because education develops that common sense which is the corner stone of democratic progress, that we feel confident of the future of democracy. Were we to limit our study of it to the Capitol at Washington, State legislatures and city halls, we might well despair; for, by its very nature, political

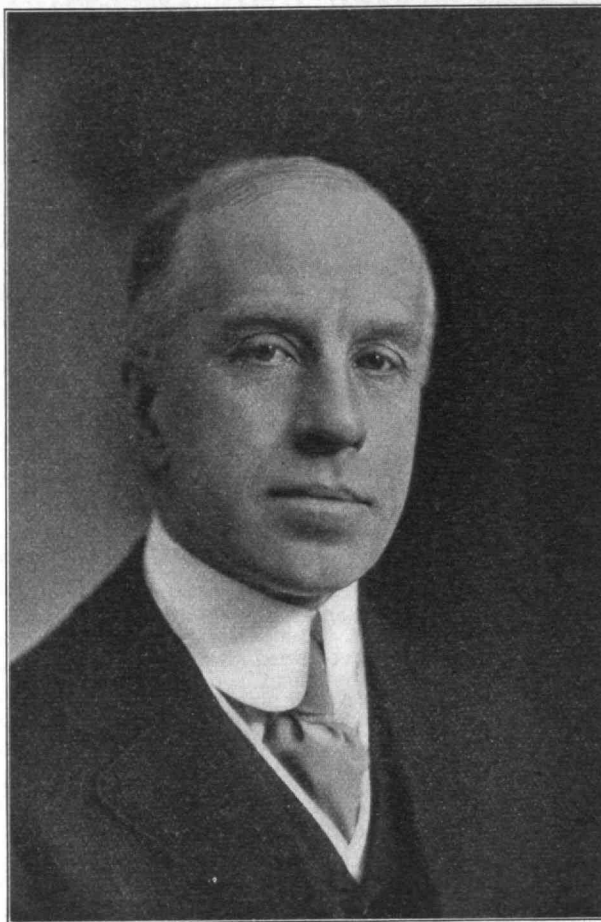


Photo by Notman

JAMES PHINNEY MUNROE, '82, Litt.D.
Present Secretary of the Corporation, M. I. T.

democracy cannot rise above the average mind and cannot, except through some happy accident, elect anything but second-rate men. But efficient democracy grows and flourishes, not in ward and State and national politics, but in the fields of industry and education. There the soil is good, the gardeners trained, and the superior man gets his proper reward. Some day, industry and education will themselves be sufficiently strong and enlightened to compel our legislators to be good enough and wise enough for all practical purposes: that is, good enough to appreciate that honesty is the best policy and wise enough to understand that moral courage is the greatest asset that a law-maker can possess.

Despite the kind of government that our big cities seem to be patient under, democracy is making best headway in the great centres of industrialism. It requires, to promote it, extensive business, highly developed industry, and a concentrated population. The factory and the big newspaper are the parents, the common school is the guardian, of what will some

day be, to use Carnegie's phrase, "triumphant democracy."

To study the effect of this genuine democracy upon internationalism, we must first inquire what a nation is.

Nationality is not determined by race, for the United States and Great Britain embrace practically every known people. Moreover, few things seem more hopeless than the national muddles which have followed the attempt to carry out President Wilson's doctrine of racial "self-determination."

A nation is not fixed by geography; for national boundaries have always been shifting, and today in Europe they move so rapidly that most map-makers, it is said, have died of the St. Vitus dance.

Nationality is not determined by language; for tiny Switzerland has three, jealously guarded, official languages, while Great Britain and the United States, which together cover so much of the earth's surface, have only one between them.

Nor is nationality wholly determined by form of government, for the British Empire has at least 57 varieties, from substantially perfect democracy down to antique tyranny; and one of the most outstanding nationalities, France, has been the victim of every form. Yet it is fair to say that, for purposes of rough definition, a nation is approximately determined by the kind of government to which, more or less consistently, it adheres.

As a matter of fact, however, a nation, like Boston, is principally a "state of mind," and has no very logical reason for being just what it is. Indeed, so unreasoning, usually, is national loyalty, and so artificial are all national boundaries, that there seems much logic in the contention of the internationalists, socialists, communists, bolsheviks, and other persons who are "agin the government" that not only is nationality an outworn absurdity, resting on nothing but the baseless claims of royal dynasties either long extinct, or rapidly being banished or blown up; but that the existence of nations is the chief cause of war and is, therefore, the principal stumbling-block to civilization.

Hence the insistence, in those radical groups, that international coöperation take the place of national competition; hence their belief in the "International," in which the cleavage is to be horizontal instead of vertical, that is, horizontal (and real) between the proletariat and the bourgeoisie, between labor and capital, between employee and employer, instead of vertical (and unreal) between the so-called nations. This horizontal cleavage will be only temporary, they say, for in time all distinctions will disappear and mankind will merge into a socialist, or communist, or bolshevik (depending upon who is talking) "federation of the world." We who believe that the nation still has an important place in civilization, and who believe, also, that the Soviet doctrines, whatever their particular fancy name, are the most dangerous of obstructions in civilization's way, must be prepared to meet the plausible arguments of the bolsheviks that democracy and nationality are incompatible.

The World War, they argue, arose from the ambition of William the Second-to-Nobody to expand the German nation, apparently with both sides of the Pacific Ocean, to say nothing of the sky, as limit. The dirty intrigue in the eastern Mediterranean had its origin in the sordid ambitions of dominant nations, like Great Britain, France and Italy, to secure special advantage in that rich territory, and in the use by them, as cat's-paws, of such weaker nations as Greece, Turkey and Bulgaria.

Bad, however, as is this national perfidy and wrangling, a Soviet International would be infinitely worse. Rivalry between nations is far less mean and destructive than is class warfare between the proletariat and the bourgeoisie. But is there no middle ground between bad Nationalism and much worse Sovietism? Since all human progress, and especially all democratic progress, must be through continual compromise, is there no safe common standpoint between a selfish, greedy and squabbling Nationalism and a still more selfish, greedy and squabbling Soviet? While crying: "A plague on both your houses," cannot mankind devise a safe, comfortable dwelling place for civilization somewhere between or outside?

One thing the experience of the past eight years has made absolutely plain: if civilization is to endure, there must be a United States of Europe corresponding, broadly, to our own United States. It is clear, however, that such a federation cannot be brought about politically or through the shortsighted maneuverings of old-style diplomats. Nothing has been more fully discredited by the recent war than those alleged statesmen, most of whom seem to be expert confidence men and all of them akin to fools. Excepting our own Conference in Washington, each formal meeting called by the self-styled leaders has been more greedy, more futile, more stupid than those preceding. If they go on as

they have, the last of them should be convened in Bedlam.

The reason, seemingly, for the futility of these international conferences is that the utterly selfish methods of most politicians are directly opposed to the best interests of mankind. Politics, through wrong usage, obliquity of vision and ingrained habit, stands always for competition, for opposition, for trying to get the better of the other man, or nation; whereas democracy, to arrive anywhere, must always stand for helpfulness, for coöperation, for bettering yourself through lifting up and working with the other fellow.

Fortunately, while those outworn diplomats are cheating, wrangling and sinking deeper in political mire, other forces, as yet little recognized, are rapidly working towards a real democracy that, in time, I feel confident, will bring about, first, a United States of Europe, and finally a rational federation of the world. This genuine, democratic internationalism will be the natural outcome of three vigorous forces: democracy in industry, democracy in education, and democracy in religion.

Democracy in industry means intelligent, willing, effective coöperation between the brains of management, the brawn of labor and the enlightened self-interest of that much abused third party, the consumer. Democracy in education connotes real coöperation between the teacher, the parent, the citizen and the pupil himself. Democracy in religion involves the general practice of genuine Christianity which, overriding sects, church rivalries and ecclesiastical ambitions, establishes itself upon the simple teachings of Jesus and of other great spiritual leaders who have been uttering, since the days of Confucius, basic, practical, common sense truths. Had those teachings been heeded, international harmony and civilized stability, to say nothing of incredible material prosperity, would have arrived generations ago. This industrial, intellectual, ethical democracy is not a Utopian dream. It is coming faster than any of us realize because it has behind it three stupendous things: (1) the instinct of self-preservation, which will stop the nations from committing mutual suicide; (2) common sense, which is the chief asset of the rank and file of men and which grows rapidly with sound education; and (3) the instinct of loyalty, which is fast emerging from a narrow and selfish jingoism into an intelligent and world-embracing patriotism.

Few of us realize that, of the instincts not based on physical demands, loyalty is the strongest that we humans possess. Just as a man cannot fight hunger by saying that he will not be hungry, so he cannot combat his clamorous instinct to be loyal to something, whether it be his family, his boss, his club, his college, his lodge, his party, his religion, or whatever else. Apparently, every man must have one or more loyalties which take hold of him with a bull-dog grip. This urge towards loyalty, if rightly used, is the basis of about everything good in industry, in politics, in education, and in religion. On the other hand, if misapplied, loyalty can do more damage than almost any other human force.

Misapplied under the cry of "my country over all," loyalty can pervert all the beautiful virtues of patriotism into the monstrous lies, hates and cruelties of World-War Germany. Misapplied under the name of religion, it can pervert the Christian, Jewish, Mohammedan and other ethical practices into a pandemonium of persecution and fanatic fury. Misapplied under the names of trade unions, or employers' associations or work-

men's and peasants' soviets, it can pervert the virtues of coöperation into vengeful strikes, wasteful lockouts and such an orgy of folly as is witnessed in contemporary Russia.

These destructive perversions of loyalty come from following demagogues, from worshipping catch-phrases, from seeking immediate self-interest and shortsighted ambitions. Above all, they take origin in the fighting instinct inherited from that convenient old scapegoat, the caveman, which impels most of us to put a chip on his shoulder, daring the other fellow to "come on," instead of to go forward, shaking hands heartily and finding out how the two of us, working together, can do, not simply double, but quadruple, or even ten times, what one man or one nation can achieve alone.

Genuine loyalty is the very opposite of what we saw in war-mad Germany, of what we are seeing in Russia, and of what is so discouraging in the unceasing strikes, lockouts and other labor troubles following the World War. Real loyalty pursues high ideals, not low self-interest; sticks to the other fellow even when he doesn't always stick to you; takes the long view of human welfare, not the short squint of national or local advantage; and appreciates that the biggest asset in getting ahead is coöperation, which multiplies results by giving as well as taking, and which, as in the old fable of the bundle of sticks — perpetuated, by the way, in the Italian Fascisti — gets incalculable strength through acting bound up with others, instead of flocking all alone by one's self. Loyalty, unlike virtue, is not simply its own reward; like bread cast upon the waters, it comes back buttered and stuck full of plums.

We all have strong within us the instinct of loyalty; the sound ideals which should govern human conduct have been dinned into men's ears for at least 3000 years; each generation is shrewder, broader-minded, better educated, and more loyal to abstractions than its predecessors; therefore, widespread democracy is certainly on its way and is sure to arrive in, historically speaking, a short time, — that is to say, within a few hundred years. If it took this Country, with all its special advantages, nearly three centuries to achieve democracy, certainly we can't ask the other nations to hurry much faster than they are.

While nationality, as already said, is largely determined by government, democracy is not at all a form of government. Monarchical England, for example, is an excellent democracy, while Soviet Russia is a mediæval tyranny. Democracy is a coöperative state of mind, a general common sense, an enlightened good-will, an organized loyalty of "each to all and all to each." This being the case, democracy will surely come, in due time, in industry; for men are rapidly learning that the greatest asset in business and manufacturing is loyalty of men to management, of management to men, and of both to the consumer. Such loyalty cannot be secured, however, except as the fruit of some form of industrial democracy, of which there are many types and degrees.

Democracy will certainly come, eventually, in education; for more and more is industry appreciating that it is profoundly concerned with building up sound teaching. More and more, too, is education perceiving that schooling is of little value unless it ties in with the real needs, not simply of industry, but of the home and the community.

Democracy will probably come, also, in religion.

Certainly nowhere is coöperation more needed than among those who strive to stimulate man's higher side.

Will true democracy come, in time, in politics? I think it will; for as industry becomes better organized, it will see the necessity of regulating politics, not, as now, to greedy and shortsighted ends, but to get the right things done in the most businesslike way. The only brand of politics which can do this is genuine democracy, in which every citizen takes an active and unselfish part.

Now, when we have achieved general democracy, or even are on the high road thereto, will there be any more nations or any further need for nationality? This widespread political democracy will be bottomed, we believe, upon industrial democracy, democracy in education and the democratic teachings of such leaders as Jesus Christ. But industry is fast learning that commercial life depends upon securing foreign markets in which to buy raw materials and to sell one's overplus; and that, therefore, economic or national fences are absurd. Education knows no national boundaries; for no man can call himself educated until he has fair acquaintance with the languages and politics, with the history and literature, of at least a few countries in addition to his own. And religion, of course, has never stopped at national frontiers, but carries its glad tidings to the world. This leaves us with only politics to account for, and brings us back, so to speak, to Washington's "feather bed." Should nations, should our nation in particular, avoid "entangling alliances," and can we, in these days of close intercommunication, side-step them even if we would?

The question answers itself. Logically, with the coming of genuine and general democracy, the nations, most of which, after all, are merely the modern leavings of defunct dynasties and vanished royal houses, should all disappear. The whole nation business seems artificial and almost absurd; yet I believe that, with the want of logic typical of human history, the boundaries of nations, even after the coming of fairly complete democracy, will still persist. What those boundaries in that future will be, it would be rash even to guess. Yet separate nations of some sort will, I think, continue, and they will do so because of that very quality of loyalty which is the effective asset of industry, education, politics and religion.

Men find it hard to be loyal to too big a thing. One of the wisest of the many wise deeds of our ancestors was in stopping at a United States of America instead of trying to set up one big, undivided nation. Every one of you Americans here is proud to be a citizen of your respective State, as I am proud to be a citizen of Massachusetts. Each of us has behind him a precious background of history, of customs, of distinctive State spirit just as real — and just as intangible — as that college spirit which every alumnus is always bragging about in public and grouching about to his class. Yet that State spirit, as at the time of the World War, naturally merges into a national spirit with a loyalty far transcending that which we hold towards our respective States.

These two loyalties not only can live in harmony; they greatly stimulate each other. When, for instance, I visit Kansas, I find added reason for being loyal to Massachusetts, just as the Kansans do, on seeing me, for loyalty to their own great State. Yet I am also stirred to new loyalty by actually visualizing that my Kansas friends and I belong to one vast, coöperative commonwealth with no forts, customshouses or barriers

of any kind separating us, and with our common, national pride cementing us.

There is no earthly reason why there should not be a similar European federation in which, for example, the Frenchman, the Italian and the Swiss would each preserve his background of great national traditions, would keep all his loyalties to France and Italy and Switzerland; and yet would add a new and larger loyalty to a magnificent United States of Europe, combining all the traditions and glories, all the powers and aspirations, of the high-contracting nations. There is no earthly reason, moreover, why that United States of Europe should not have, at the Hague, or elsewhere, a single Court, comparable to our Supreme Court, in which all international differences would be bloodlessly settled, as are those which arise between our separate States.

Europe cannot have this, however, so long as the old crowd with their old animosities control. That pirate crew must be made to walk the plank. The only power which can make them walk is real democracy; and the only force which can bring democracy is sound, extensive education backed by enlightened industry and

illuminated religion. In developing democracy, building up education and coöperating with international industry, this Country can, and should, take a leading part, if she is to insure herself against another, and an infinitely worse, World War. Our duty, even from that somewhat selfish, and still more from an ethical, standpoint, is to rouse ourselves from the sloth of Washington's "feather bed" and to help Europe convert herself into a true federation in which that poisonous and absurd anachronism, war, will be as impossible as between Massachusetts and New Hampshire.

That Federation will be, in time, a union of democratic commonwealths, each with an identity based, not as now, on race hatreds, economic jealousies, "spheres of influence," or political intrigues; but on the common and coöperative interests of all. And those commonwealths, like ours, will be bound together, not by "ententes" big or little, but by a common loyalty to the high ideal of giving every human being a fair chance to contribute his best and his utmost to the worthwhile work of the world.

The Late Dr. J. D. MacKenzie, M.C.

Members throughout the Dominion will learn with the deepest regret of the death of Dr. J. D. MacKenzie, which occurred on Friday, December 15, in the Hospital of the Department of Soldiers' Civil Re-establishment at Ste. Anne de Bellevue, Que.

As is probably generally known to members, Dr. MacKenzie, in April, 1916, enlisted as a private in the 185th Cape Breton Highlanders. In June of the same year, his excellent work won him a commission, and as Lieutenant, he was dispatched overseas with the 85th Nova Scotia Highland Brigade. In France, he distinguished himself when in command of the Cape Breton Company of the Brigade, and in recognition of his gallantry during certain operations east of Rosieres-en-Sauterne, on August 10, 1918, he was awarded the Military Cross. Three weeks later, Dr. MacKenzie had the misfortune to be severely wounded in the right lung, and although more than four years have since elapsed, this wound was directly responsible for his death.

Dr. MacKenzie was born at Baddeck, Cape Breton, on June 1, 1888. From his earliest youth it was evident that he possessed the ambition to succeed, and with it the energy and bull-dog courage to achieve his ambition. Putting himself through college, he was graduated as Bachelor of Science from the Massachusetts Institute of Technology in 1911. Then, after one year as Instructor in Economic Geology at Cornell University, he took a post-graduate course in geology at the Massachusetts Institute, and obtained the degree of Ph.D. in 1916. Meanwhile, he had been appointed Assistant Geologist on the Canadian Geological Survey in 1912, and this position he continued to hold until

he went overseas with the Cape Breton Highlanders in April, 1916.

After his discharge from hospital, in June, 1920, Dr. MacKenzie was appointed Associate Geologist on the Geological Survey, and was placed in charge of the British Columbian Office, in succession to Dr. Camsell. In the same year, he became a member of the Institute, and at once interested himself keenly in its activities, being elected a member of the Administrative Committee of the British Columbia Division.

During these years, Dr. MacKenzie displayed wonderful fortitude and cheerfulness in going about his professional and other duties, for the condition of his wound was such that the trained skill of his devoted wife was necessary for dressing it daily. (Mrs. MacKenzie, formerly Miss Isabel M. Lord, had nursed Dr. MacKenzie while in the military hospital in England; they were married in Canada in 1920.)

At the beginning of December, Dr. MacKenzie, accompanied by Mrs. MacKenzie, left Vancouver to undergo a series of corrective operations at the Ste. Anne de Bellevue Hospital, which he entered on Monday, December 11. The first operation was successfully performed on Thursday at 1 o'clock. Dr. MacKenzie came out of the anæsthetic two hours later, and was feeling very well. However, after a cheerful talk with his wife, he was advised to go to sleep, and from this sleep he never awakened. Efforts to rouse him were made, but a condition of paralysis gradually spread until only the heart was acting, and he died at 8.30 p.m. on Friday, December 15. In addition to Mrs. MacKenzie, Dr. Charles Camsell was present until the end.

—*Canadian Mining Journal*

Frank Wellington Hodgdon, '76

*A Short Account of the Works of one of
Technology's Well-known Graduates*

By JOHN R. FREEMAN

Secretary, Class of 1876

The Commonwealth of Massachusetts lost a faithful servant of rare quality in the death of Frank Wellington Hodgdon, Engineer of the Public Works Department of the Commonwealth, which occurred on January 26 at his residence in Arlington. Technology itself lost the wise guidance he had given through long membership on the Alumni Council.

Mr. Hodgdon had devoted his whole professional life of forty-seven years since graduating at Technology in 1876 to the service of the Commonwealth in the departments of Harbor Commissioners, Land Commission, Harbor and Land Commission, Directors of the Port of Boston, Waterways and Public Lands and Department of Public Works, as the same line of service had successively been called with changing organizations of the Commonwealth's administrative affairs.

The site on which the new Technology stands was surveyed and reclaimed from the mud flats under the advice of Mr. Hodgdon many years ago, as also were the Commonwealth flats at South Boston on which now stand the Army Base, the Commonwealth docks, the Fish pier, and many important structures of the great ocean and railroad terminals. Alongside of the Army Base, the great Commonwealth dry-dock was built under his designs and supervision. It was the largest dry-dock on this side of the Atlantic Ocean and the second largest in the world.

He was devoted to the service of the Commonwealth, found happiness and contentment in its opportunities and declined offers of more lucrative positions in private engineering practice. His outstanding transparent honesty of purpose was one of his great charms. This, with his many years of service and the wide acquaintance that this brought among legislators, led to hundreds of informal and confidential conferences by earnest representatives to the General Court who were in doubt amid the confusion of testimony as to how best to serve the interests of the Commonwealth. His intercourse with contractors on harbor works around Boston and all along the coast was marked by a rare and kindly spirit of service. He freely advised them out

of his long experience, without thought of other compensation.

In the town of Arlington he had been a model citizen for nearly fifty years, serving freely on a great variety of committees having to do with town improvements, and also giving notable service in the material affairs of the old Congregational Unitarian Church.

Besides acting as Consulting Engineer on the Cape Cod Canal and preparing report and estimates on the Taunton & Boston Canal, he was in charge of the improvements of the Florida Coast Line Canal from St. Augustine to Key West. He had built breakwaters, jetties and sea walls, anchorage basins, etc., for the protection of our harbors, shore fronts and rivers throughout the state.

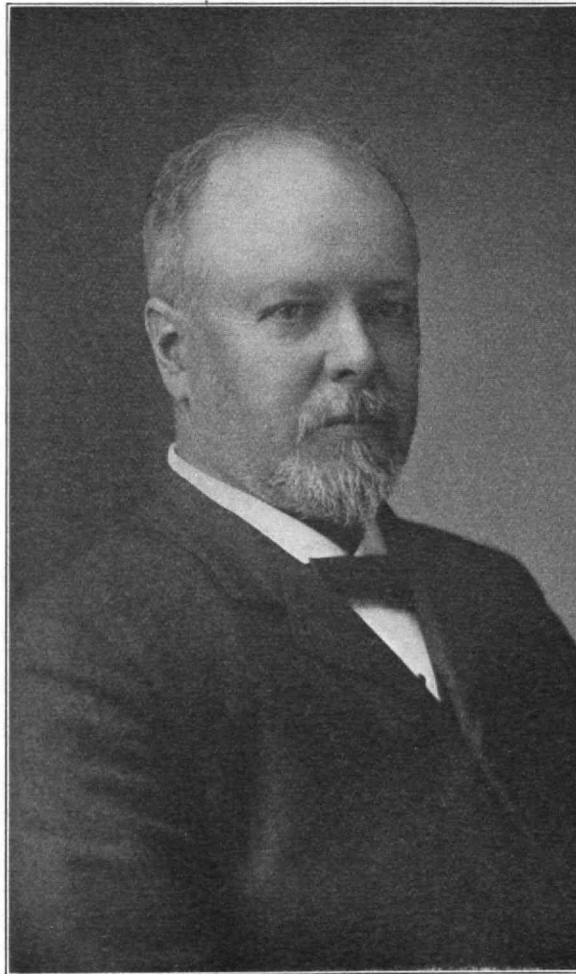
He aided materially in developing and making a useful disposition of lands reclaimed, was active in the sales of many of the made lots of Back Bay Lands, some of the deeds of sale being written in his own hand.

In 1897 Mr. Hodgdon was appointed a member of the Commission of Topographical Survey and Map of Massachusetts, then charged to make a survey of the town and city boundary lines of the state. After this Commission was abolished in 1901 and all its duties transferred to the Harbor and Land Commission, he completed this work in 1915. In this connection, co-operating with duly appointed officers of the adjoining states, he took charge of the necessary sur-

veys and re-marking, with suitable bounds (under the orders of the legislature) all the external state boundaries, bordering on Rhode Island, Connecticut, New York, Vermont and New Hampshire. He was a special commissioner on the two latter.

On account of this experience, in 1911 he was appointed by President Arosemena to represent Panama on the Commission of Engineers on the Costa-Rica-Panama arbitration.

Mr. Hodgdon was interested in the International Association of Navigation Congresses, of which he was a member. Throughout his long professional career he was a great contributor to the public welfare and of wholesome and unflinching integrity.



FRANK WELLINGTON HODGDON, '76

*Member of the Alumni Council
who died on January 26*

Colonel Frederick W. Phisterer

An Impression of the New Head of the Department of Military Science and Tactics

By ROBERT E. ROGERS

*Assistant Professor of English,
M. I. T.*

A young lieutenant conducted me through the long, well-lighted room, where a number of other equally young lieutenants* were being very busy with typewriters and conversation, to a desk at the far end. A strongly built stocky gentleman, a bit above middle height and well on the sunny side of fifty, greeted me very genially, seated me and tilted back in his own desk chair, willing apparently to let me do my worst. He was dressed in blue serge, which put me at once at my ease, so much so that I asked him why. It appeared that his latest service had been in Atlanta and Baltimore, where overcoats and winter clothing are not so necessary as in our own unexpected climate. Orders to report at the Institute rather suddenly landed him in the lap of winter before an overcoat could be had. Hence the blue serge. Q. E. D.

A quiet man, Colonel Frederick W. Phisterer, now in charge of the department of Military Science at the Institute, a modest man apparently, and not given to volunteering much information about himself. But when questioned, his answers are instant, direct, complete and concise. Physically—for people's looks are always interesting, I think—you can get a rough impression of Macklyn Arbuckle, the distinguished comedian, as he was some years ago. A more military Macklyn Arbuckle, trimmer in figure, more reserved in manner, not so unctuous, younger. But the head and face are like; a strong round head with a finely domed forehead, strong brows, cool gray-blue eyes almost lost in humorous and friendly crinkles when he laughs, a rather strongly marked face, and a good wide flexible mouth with the real Arbuckle smile, a solid chin and the suspicion of another—the head set closely and solidly on a big chest and shoulders. Not the lean Pershing type; more like Eddie Miller, perhaps the most common and representative figure of a successful American business and professional man. He speaks rather slowly and carefully, but with emphasis, with the air of being at leisure for you and your interests, and obviously he thinks before he speaks. So much for a twenty-minute impression.

Frederick W. Phisterer, as I gathered by degrees, was born in Columbus, Ohio, in 1873, though his family

home is Albany, New York, where he prepared for college. After a year at the General Electric Company at Schenectady in the student apprentice course, he entered Cornell in 1892, graduating in 1895 as Bachelor of Science in Mechanical and Electrical Engineering.

His thesis was a twenty-four-hour test of a street railway company.

When I commented on the fact that it was something of a feat to carry two technical courses and take one's degree in both in three years, Colonel Phisterer replied with some warmth that he would never let a boy of his do it. It spoiled his college life, he said. It wasn't worth the effort it took. But he had to do it and he did it! He followed up with his Master's degree in Mechanical Engineering in 1896 and in the following year, 1897, received his degree of Doctor of Science in Electrical Engineering, his thesis being upon Insulations.

Then, after a year in the office of the Chief Engineer in the Stanley Electrical Company in Pittsfield, the Spanish War broke and young Phisterer embraced the career which he has since followed. In July, 1898, he was appointed from civil life as a second lieutenant in the Coast Artillery, in which arm all his service has been except for the last three and a half years, during which he has been detailed to the Inspector

General's Department. He saw no foreign service during the Spanish War and the Philippine Insurrection; in fact, most of his service has been in the United States. For three years, from 1902-05, he was stationed at Boston, down the harbor; the years 1905-08 saw him at the mouth of the Columbia River; from 1908-13 he was at Fort Hamilton in New York Harbor. There followed a tour of duty in Honolulu, Hawaii, 1913-1916. During the years 1916-17, he was Inspector Instructor of the Coast Artillery, National Guard of the state of Oregon, the kind of job he had held before when, for one year, he was also Inspector Instructor for the 13th Coast Artillery of the New York National Guard at Brooklyn. He is also a graduate of the Coast Artillery School at Fort Monroe. His service in this country was with the 9th Regiment, first U. S. Coast Artillery.

In 1918-19, he was overseas. Appointed provisional colonel in December, 1917, he commanded the 63d



Photo by Craftsman Studio

COL. FREDERICK W. PHISTERER

*Who has replaced Col. John B. Christian, Retired,
as head of the Institute's Department of
Military Science and Tactics*

* [We fear that Professor Rogers doesn't always know a major when he sees one. "Pretty sort of treatment for a military man." Eds.]

Artillery and the 39th Artillery Brigade of the Army Artillery Reserve. His regiment was training at Limoges during its time overseas and he received his command of the brigade only shortly before the Armistice. During the preparation for the attack in the St. Mihiel sector, he was detailed as an observer. He received his permanent appointment as colonel in July, 1920.

On his return to this country, he was detailed from the Coast Artillery to the Inspector General's department for four years, serving in the 9th Corps Area at San Francisco, the 4th Corps Area at Atlanta and the 3d Corps Area at Baltimore, whence he was ordered to his present position at the Institute for what is supposed to be a four-year detail. Colonel Phisterer is married and has one daughter, now at school in Boston.

Although new at the business of training the R. O. T. C., Colonel Phisterer seemed to be looking forward to his duties at the Institute with much interest and pleasure, particularly, he said, as this was the first time he had ever been ordered back to a place where he had been before and had already taken much pleasure in picking up the threads of friendships made when he was in Boston twenty years ago. "Also," he said, "because when I told a friend where I was going, I was informed that down at Fort Monroe the M. I. T. had the reputation of having the best R. O. T. C. unit in Coast Artillery of all the colleges that sent men there."

This led to a brief discussion of the value of the R. O. T. C. work. He had, Colonel Phisterer said with some deliberation and care in choice of words, an impression of considerable general satisfaction among army authorities at the amount of work and the quality and spirit of that work done in the R. O. T. C. courses in our American colleges. He had yet to hear of any criticisms of any schools in that respect. Furthermore, there was no question but that the system would furnish a very valuable reserve to the army. The class of men in the R. O. T. C., especially at the technical schools, were most certainly fitted to advance further and more rapidly than the average of the material in the National Guard. The boys who are being trained as technicians ought to eat the work up. In this way, there should be no question that the R. O. T. C. would do very valuable work towards organizing the national defence.

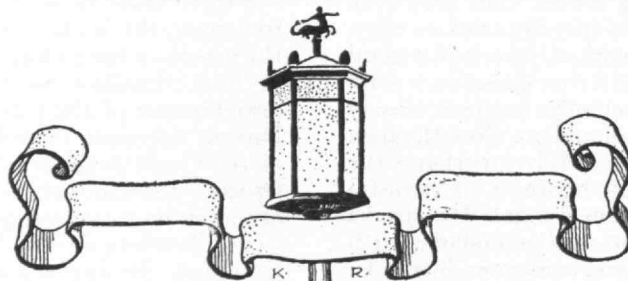
Beyond that, Colonel Phisterer would say nothing—indeed, he seemed a bit amused at his ideas being of so much interest—about the conditions of the Military Science department and the R. O. T. C. course at the

Institute. What he had seen so far, he said—remembering that he had been among us only a short time—showed to his mind very careful planning and enthusiasm by his predecessor and his assistants, that the work seemed to be very well coördinated, that he had no intention of making any marked changes or reversals of policy, and that he preferred to say nothing until he had become more familiar with the work of his department.

He did speak with some energy, however, of the necessary cutting down of the army personnel in conformity with recent acts of Congress. The question came up from a comment of mine concerning a recent graduate of the Institute, a brilliant man who, after a distinguished career in the air service during the war, had remained in the service and was only now resigning, reluctantly, because under present conditions there was no career for him. It was most unfortunate, Colonel Phisterer commented,—it was a mistake, it was a disaster! This should not be confused at all with the elimination of the class B officers who had been dispensed with as not being of the highest quality. This cutting down was a different affair, the loss to the service of many brilliant and able men to whom it was a great hardship, who were wrapped up in the service and whose promise and ambition were being most unfortunately sacrificed.

This terminated the interview, not on Colonel Phisterer's part, for he seemed most kindly at my disposal, but from my feeling that perhaps he had other things that needed to be done. I wasn't altogether satisfied, however. I suspected that there were things which he hadn't said about himself, which, in decency he couldn't say. As I remarked before, he seemed most unassuming, modest, and reluctant to blow his own horn.

But I got on the telephone a former associate of his, an Institute graduate, an officer now stationed down the harbor, and received from him an eager and enthusiastic confirmation of my impressions. Here was the sum of his testimony. A wonderful commanding officer, who would have been brigadier general had not the Armistice prevented. A man who had done all his work actually commanding troops, a good leader, one who inspired great respect and confidence, well liked and popular. And—which immediately concerns us at M. I. T.—not only a thorough engineer but an experienced teacher, who although quiet and not, apparently at first, magnetic, has great ability at teaching and dealing with men, one who should be a very valuable addition not only to our military work but to the Institute teaching staff at large.



The Ninety-Fourth Meeting of the Council

In which the Advisory Council on Athletics scores a triumph



JOHN ARNOLD ROCKWELL, '96, M.D.
Chairman of the Alumni Advisory
Council on Athletics

It was the twenty-ninth of January, and members of the Alumni Council held their breaths accordingly. They had been promised something good to hear, and they were anxious that the hour for the hearing should come. It did. Hours seldom disappoint. Speakers sometimes do, but the ninety-fourth meeting was a happy occasion upon which they showed all the dependability of Chronos himself, and considerably more inspiration. But before we set down an account

of the main feature of the evening, let us record the preliminaries.

There was a dinner, and that's about enough to say about that. During the dinner, there was a salad, and with unique conjunction, there was a Salad Orator. He was William R. Kales, '92, of Detroit, who had, a few days before, returned from New York, newly decorated with the Presidency of the Technology Clubs Associated. Mr. Kales spoke briefly, so brief must be the record of his speaking.

As the last member gulped his last spoonful of frozen pudding, the watchful Mr. Carlson rose and called the business meeting to order. By way of starting it, he announced that the Executive Committee had just elected Dr. Stratton an Honorary Member of the Council. Much applause, together with voiced regret that Dr. Stratton, for whom a major portion of the evening had been planned, had been called to New York, and was, in conformity with a principle of Euclid, absent.

Apparently the Executive Committee had been putting real thought upon the problem of how the personnel of the Council might be improved, for Mr. Carlson next announced another of its actions: the election of Dean Henry P. Talbot, '85, to membership on the Council as a representative of the Technology Club of Japan. The news was cheered, Dr. Talbot pledged fealty to his new constituency, and was quoted by some as having expressed the determination to carry out his campaign promises at once.

The first subject that was opened for discussion was the coming Inauguration of President Stratton. Dr. Allan Winter Rowe, '01, moved immediately that it be considered the sense of the Council that a formal inauguration of Dr. Stratton should be held at a date to be chosen, preferably before commencement.

In amplification of his motion, Dr. Rowe again

spoke briefly, saying, "Let us not deny our birthright." He urged men of Technology not to forget that it was, after all, an educational institution. The inauguration of a president was an opportunity for such an institution to indulge in a little splendor.

The word Splendor apparently raised a vision of the Institute Faculty before the eyes of Mr. Carlson, because he immediately called upon Prof. E. F. Miller, '86, its Chairman, for an opinion on how willingly that body would consent to fit into a picture giving the impression of splendor. Professor Miller, although favoring formality in the Inauguration, was not hopeful of the extent to which the Faculty could be persuaded to the plan. He alluded to the Cap and Gown incident of 1922, in which the then Senior Class had, instead of deciding the issue itself, had been courteous enough to refer it to the Faculty, which had immediately said No. "The Faculty must be educated," said Professor Miller, "perhaps by those whom it considers uneducated."

Dean Talbot echoed these sentiments. He urged formality at the Inauguration, that it might be made a function to which dignitaries of other institutions could be bidden with propriety.

Dr. Rowe then amplified his previous comment by suggesting Symphony Hall as a possible theatre for the ceremony, and pointing out that, with the organ, there was the possibility of a musical program which might include a non-bathetic ode similar, perhaps, to the one written by Professor Rogers, and to have been set by Mr. Frederic Converse for the Inauguration of President Nichols.

Mr. Leonard Metcalf, '92, added his voice to the expressions of favor for formality, and the question was put. The vote was unanimous in its favor.

It might have seemed that this ended the discussion, but Mr. Andrew Fisher, Jr., '05, rose with the remark that it did not seem to him that the ceremony of Inauguration need be held off the Institute grounds just because Walker Memorial was insufficiently large to house all visitors and spectators. It seemed that Mr. Fisher, during the inauguration of 1921, had been unable to gain access to the hall, and failing this, had lain upon his stomach on the grass in front of the building, and listened to the speeches as relayed by an amplifier, thoroughly enjoying the experience. It did not seem to him that others could not partake of this simple pleasure with equal profit. Mr. Metcalf gently suggested that reclination upon the stomach was not a posture which could be suggested as one of sufficient dignity to be assumed by the presidents and visiting officials from other universities. Mr. Fisher did not seem convinced, but the rest of the Council did.

The subject of Inauguration disposed of, the Council proceeded to a post mortem on the Annual Dinner, held some two weeks before. It was the sense of the Council (though you will not find it on the minutes) that the Dinner, judged from an epicurean standard had been none too satisfactory. Mr. A. T. Hopkins, '97, suggested that in addition to taking steps toward the improving of the dinner, the Council move to provide another All-Alumni function during the year, and

suggested that the most appropriate thing would be a smoker. This struck the Council as an admirable idea, and it carried the motion without discussion.

This reminded Mr. Fisher of something. The Technology Club of New Hampshire was holding a winter meeting at Manchester on the Friday which followed the Council meeting. Mr. Fisher was a moving spirit, and wished to inform the Council, and the World, of his plans. It had previously been advertised that the Governors of Maine, New Hampshire and Vermont would be present, as would Dr. Stratton. Someone heckled Mr. Fisher. "Are your three Governors coming?" asked Someone. "The Gov'nor of Vermont can't come," replied Mr. Fisher, "so we told the Gov'ners of Maine and New Hampshire that he wasn't coming." The inference was that the Governors of Maine and New Hampshire were also not coming. But this did not discourage Mr. Fisher. "If you want to go, call me up," said he. "My number's Congress 635." He seemed anxious that this become generally known. "My number's Congress 635," he said again, "if you want to go, call me up. My number's Congress 635."

"His number," said Mr. Carlson to the Council, "is Congress 635." This assurance that he had been correctly understood as having a telephone number of Congress 635 seemed to comfort Mr. Fisher and he lapsed into silence.

Then, after a minor sortie regarding the presence of guests at the deliberations of the Council (of which the Council seemed to approve), the *pièce de resistance* of the evening was announced and presented.

It consisted of a report from the Alumni Advisory Council on Athletics, represented, in turn, by Messrs. J. A. Rockwell, '96, H. S. Benson, '12, H. E. Worcester, '97, and A. W. Rowe, '01, concerning a history of the past, and—which was what the Council came to hear—a prophecy of the future, of Athletics at Technology.

Dr. Rockwell, the Chairman of the Council on Athletics, spoke concerning the "necessity of a body that would carry along the mental ambitions of engineers," and outlined the reasons which caused the Council first to come into being on January 18, 1898.

Mr. Benson, who succeeded him, gave several illustrations of steps taken by other institutions to give adequate attention to athletics. The gymnasiums of Syracuse and Dartmouth were, he said, commonly considered as the best possible structures for the purposes they fulfilled. (Ah-ha! You grasp the plot?) Technology needs a new gymnasium, needs it badly, and these gentlemen of the Advisory Council were sufficiently courageous and interested to begin the fundamental missionary work. Bravo!

Following Mr. Benson, Mr. Worcester spoke briefly. Then, as the climax, came the speech of Allan Winter Rowe.

This evening, Dr. Rowe aided his eloquence with lantern slides. He began by placing before the Council the problems of space allotment to undergraduate activities in the inadequate confines of Walker Memorial, and caused to be thrown upon the screen a diagram which showed by means of circles, concentric and juxtaposed, the amount of floor space available in the student offices, as compared with the cross-sectional area of the men who were trying to work in the offices. Dr. Rowe pointed out, with the aid of his salad fork, the total inadequacy of the available space.

Due to the inadequacy of space supplied them, the student publications had recently begun agitation for a building of their own. This partial segregation Dr.

Rowe regarded as undesirable. Yet, he was frank to confess, something must be done to relieve the situation. There was, even, so little room for student committee meetings that, periodically, students using the Walker Library to read, or amusing themselves with innocent pastimes in the several lounges, were forced to pick up their belongings and remove, that a meeting might be held. The injustice of this was apparent. What was to be done?

Dr. Rowe then unfolded the Big Scheme. One half of the old airplane hangar is now devoted to an additional gymnasium to remedy, as well as can be remedied by temporary measures, the inadequacy of the Walker gym. If, said Dr. Rowe, the Institute authorities would be willing to take a deep breath and give the entire space in the hangar over to a temporary gymnasium, the Advisory Council would recommend the complete withdrawal of athletic headquarters from the Walker Memorial building, thus giving up the space now occupied by gymnasium, locker rooms, showers and offices, to undergraduate activities needing office space.

"But," said Dr. Rowe, "athletics cannot live permanently in the hangar. They must some day have a decent, adequate and permanent home." Applause. "Let me urge upon you at this point, gentlemen, the paramount necessity of keeping this home upon the Institute site." Applause redoubled.

Obviously, only one conclusion to be drawn. Some time, within the not-too-distant future, Technology will have a new gymnasium building, with a swimming pool, and adequate space and equipment for the pursuit of all possible sports. Its coming, in whatever manner, was unmistakably foreshadowed, by the tone of the speeches of the evening. Even if no feature of such a building would interest some alumni, said Dr. Rowe, they at least should remember that, in such a building, there would be provided a hall of size sufficient to care adequately for all alumni gatherings, graduations, inaugurations, never so elaborate.

There was brisk discussion when Dr. Rowe resumed his seat. After several minutes, I. W. Litchfield, '85, claimed the floor to express his gratitude and admiration for the presentation of the evening. "I've been impressed more than I can say," said Mr. Litchfield. "I-I feel like making a motion!" There could have been no finer tribute.

Mr. Litchfield went further. He actually made his motion. It was to the effect that a committee be appointed to draw up an appropriate motion which would express the policy of the Alumni Council concerning further matters of athletic development and student activities.

C. W. Aiken, '91, rose to express, on behalf of the Council, grateful thanks for the untiring activity of Dr. Rowe and the Council on Athletics, toward the solution of one of Technology's most vexing problems. The Council owed to Dr. Rowe a debt that could never be repaid.

With which sentiment Mr. Carlson concurred most heartily. "If we should pay Dr. Rowe all we owe him," he said, "we should have nothing left."

"Rot!" said the modest doctor, bringing the evening to a close.

Next day, the newspapers gave wide publicity to the tale that Technology would immediately set about drawing up plans for a new million-dollar gymnasium. Well, it isn't true, but count upon this much: some day, it will be.

TECH MEN IN THE PUBLIC EYE

W. H. MERRILL, '89

An iron telephone pole swinging from the roof like a giant pendulum hit an automobile bumper and bent it badly. Then a derrick lifted a red hot steel safe high above a third floor roof and dropped it on a pile of bricks far below.

The day's work had begun at the Underwriters' Laboratories, Inc., a topsy-turvy land wilder than anything Alice in Wonderland ever dreamed of—a place where experts burn and smash and break the creations of other experts, all to make life and property safe.

The glowing safe, fresh from a furnace with a temperature of 1,700 degrees, failed to break under the strain of the long drop, so scurrying workmen bundled it back into the oven for another hour's cooking. If it survives that they will chisel, burn and smash their way into its compartments, and if the books and papers there are found in good condition the manufacturer may attach an "Underwriters' Laboratories, Inc." label to his product.

Upstairs a little automatic machine is sticking keys in automobile locks—three locks at a time—unlocking them, locking them again and then withdrawing the keys. An automatic counter records the operation.

The locks must stand the strain of 50,000 closings and openings.

In the heat testing rooms flames are seeping through the cracks of a wood lined, metal covered fire door, built into the brick front of a furnace. Near by, an attendant with electric recording devices is studying what is happening in the 1,600 degree inferno behind the red hot door. Suddenly the entire furnace front, door and all, rolls away on an overhead track and a workman plays a two-inch fire hose over the glowing door. The color dies away. Inside the metal covering is a mass of charcoal, but the steel plates have withstood an hour's baking without letting sufficient fire through to ignite anything beyond the door.

Near by, a cement covered steel pillar such as is used in modern buildings is being installed in a tall furnace by brick masons. Its base rests on solid concrete. High above a gigantic hydraulic press clamps down, applying an enormous pressure. The furnace front is sealed, the gas turned on, the heat gradually rising until at the end of eight hours it will reach 2,300 degrees. If the pillar still stands, the hydraulic press, with a maximum power of 545,000 pounds to the square inch, will be turned loose to crush it.

From the tangled debris experts will construct the theories on which fire-proof pillars are to be built.

Topsy-turvy land is working at full blast. In the roof testing room the testers have completed a miniature roof of patent composition shingles. Gas flame at the end of a long wind tunnel sweeps up over the eaves and plays along the roof surface. Asphalt in the roofing catches fire, but when the blast is shut off the flames die out. The roof has passed the test and would resist the usual flying brands from other burning buildings.

As the roof blaze dies out a workman pours five gallons of gasoline into a near by tank and lights it. Up above an automatic valve opens and fills the tank with a foamy chemical, smothering the fire.

A party of visitors is coming down the hall. An engineer builds a small fire on the tile floor. The flames crackle for a minute or two.

Then an automatic fire door, which functions if the temperature changes ten degrees in two minutes, closes, an automatic sprinkler head blows off and the fire is out.

The Underwriters' Laboratories, Inc., was founded by W. H. Merrill, its president, with funds furnished by the National Board of Fire Underwriters. The institution is self-supporting through nominal testing fees and the service charge for factory inspection and the sale of its labels, which are familiar on hundreds of devices.



WILLIAM H. MERRILL, '89
*Who Founded and is President of the
Underwriters' Laboratories, Inc.*

Mr. Merrill, who came to Chicago in 1894 as chief electrical inspector of the World's Fair, originally started a testing laboratory to standardize electrical equipment.

Now there are laboratories here devoted to fire protection devices, hydraulic and fire fighting equipment, gases and oils, chemicals, electricity and signals, automotive parts, safety devices for machinery, and a section which passes on the safety of airplanes and the qualifications of pilots. Major R. W. Schroeder, former holder of the world's altitude record, is in charge of this work.

In addition to the big three-story laboratories here, covering half a city block, an electrical laboratory is maintained in New York to pass on the efficiency of electrical apparatus. A similar laboratory here deals with the fire-resisting qualities of insulated parts.

The laboratory follows up all labeled products by testing samples purchased in the open market or received from users from time to time. The automobile lock department alone, passing on jacks which, by their use, decrease insurance premiums, examines thousands of samples yearly.

An inventor appeared at the laboratories recently to have a new automobile lock tested. Besides what he believed to be an absolutely burglar proof lock, he had equipped his car with a signal device intended to blow if any one tampered with the machine.

While he was arranging for the test an assistant in the laboratory went outside, picked the lock and hid the car. The inventor was satisfied with the demonstration of the laboratory's efficiency.

—New York Herald

HUGH K. MOORE, '97

The (New Hampshire) House of representatives numbers among its members this year a man of science who is known abroad as well as in America for his remarkable record of achievement. He is Hugh K. Moore of Berlin, chief chemical engineer of the Brown Co., and drawing the highest salary on their books out of more than 25,000 employees.

One of the reasons the Brown Co. can afford Mr. Moore is his marvelous utilization of hitherto waste products. For instance, the caustic soda, which formerly went down the river, is now supplying a large part of the trade in New England.

It was he, who during the war invented the sulphur chloride foundation for mustard gas, so that America was manufacturing in great quantities a gas which the Germans thought could only be made in Germany from a by-product of the dye industry.

From waste hydrogen gas, Mr. Moore made a synthetic lard by adding it chemically to peanut oil, which is better than the real thing because it has a higher smoking point. This invention brought on a law suit with the manufacturers of Crisco, which was tried in the U. S. Supreme court with Charles E. Hughes, secretary of state, acting as *Amicus Curæ* for the American Cotton Oil Company. A unanimous decision was given in Mr. Moore's favor, almost the only unanimous decision which the supreme court has granted.

Mr. Moore is vice-president of the American Institute of Chemical Engineers. The institute voted Mr. Moore a gold medal for the best contribution to applied science since 1913.

—Concord (N. H.) Patriot

CHARLES H. PAUL, '96

The Norman Medal awarded annually by the American Society of Civil Engineers for the work it considers to be the most notable contribution to engineering



CHARLES H. PAUL, '96
Recent recipient of the A. S. C. E.
Norman Medal.

science during the preceding year, was presented at the January meeting of the Society to Charles H. Paul, '96, Chief Engineer of the Miami Conservancy District, established under the provisions of the Conservancy Act of the State of Ohio. The award was made to Mr. Paul for his article on, "Core Studies on the Hydraulic Cores of the Dams of the Miami Conservancy District," published last year in the Proceedings of the A. S. C. E.

The Conservancy Act of Ohio was passed by the Legislature, Feb. 18, 1914, to provide an organization and funds for the prevention of

floods such as the Dayton disaster of the preceding spring in which over 400 lives were lost, \$100,000,000 of property wiped out, and the communities of the valley were prostrate as a result of the calamity.

The flood prevention measures have included the "construction of five dams, levee and channel improvements at nine villages and towns, the relocation of four railroad lines, and of many highways and wire lines, the elimination or removal of one village, the lowering of water and gas mains, and many minor pieces of work. The quantities of materials involved were large.

"The concrete if put into a road would make a 16-foot concrete highway from Cincinnati to Toledo. The earth moved, if put into ordinary two-horse dirt wagons drawn by teams, spaced far enough apart to allow the teams to walk, would fill a string of wagons long enough to go around the world six times. To move such an outfit would take almost twice the number of horses and mules existing in the United States."

LOUIS K. ROURKE, '95

Louis K. Rourke, former public works commissioner, was today appointed by the supreme court to be one of the members of the corporation and managers of the Franklin fund.

This is a fund left by Benjamin Franklin in 1719, amounting at that time to £1000. In 1904, it had grown to \$406,396, when an equal amount was given by the late Andrew Carnegie. A portion of the fund was used to build the Franklin Union.

—Boston Traveler

WITH THE UNDERGRADUATES

ON TO BROADWAY FOR TECH SHOW

As this issue of the Review is read, the coaches and the management of Tech Show are busy with the final touches which will bring Tech Show to the proper pitch for presentation to a critical New York audience. The Show will begin the first New York tour of its history when it leaves Boston in time to play in Hartford, Connecticut, on the night of March 19. After this performance, it packs itself hastily into baggage cars and pullmans and leaves for New York, where its first performance is the matinée of March 20. The first evening performance comes that night. Both New York performances are in the Waldorf Astoria Hotel. The present indications are that this first night and the corresponding first afternoon will be witnessed by full houses. New York alumni are thronging to the



THE SUN TEMPLE

Evelyn Hubbard (Richard Whiting, '26)
listens tolerantly to the passionate
outpourings of Senor Estanzo,
(J. D. Cochrane, '23)



THE SUN TEMPLE

Arthur (F. D. Gage, '23) tries persuasion on Seraphina (Hood Worthington, '24)

support of the venture which many of them have discussed and urged for several years.

The Tech Show management believes that its policy of expansion as exemplified by this tour will give the theatre-going alumni of the cities it visits another view into undergraduate life at the Institute and a broader knowledge therefore of the Institute itself. The alumni of recent graduation still retain a good idea of what Tech Show is and the type of production that is turned out every year. To the alumni, not of such recent graduation, it is hoped that this tour will, for the first time, convey to them the scale upon which Technology undergraduates put forth this production.

Tech Show, 1923, is titled The Sun Temple and was written by Thomas Boeke, '24. The coach



*Evelyn, being pensive,
or something*

of the cast is this year, Mr. Ralph G. Harlowe, a man of wide and varied-experience in the professional theatre. As usual, Miss Virginia Tanner has had the direction of the chorus and the ballet. Mr. Charles G. Young is the director of the orchestra. A large portion of the music, this year, is written by Frank Gage, '23, H. G. Ripley, Sp., and Gavin Watson, '24, all of whom contributed to the score of Tech Show 1922.

With the exception of the coaches and the actual fabricators of the scenery Tech Show remains as always completely in the hands of undergraduates. The libretto, lyrics and music are written com-

pletely by undergraduates; an undergraduate Stage Manager, with the help of undergraduate assistants, runs the performances; the scenery was designed by undergraduates; the Director is the one man in the orchestra pit who is not an undergraduate.

The Sun Temple has a strictly Mexican background. In the foreground one beholds an American leading lady and Mexican bandit and his bad men, an ex-American college student, a Spanish senorita of considerable fire and other similar characters. There is the usual extravagant ballet.

"The Sun Temple," say those who have witnessed its growth, contains all the ingredients for musical comedy success.

THE GOOD WILL ELECTION

Technology entered a candidate in the National Good Will Election, which began on February 7 and will end on February 28. She is Miss Marjorie Pierce, '22, who was graduated from Course IV last year and is now studying for a Master's degree in Architecture. One pays 10 cents for the privilege of voting for one's favorite and can repeat the process indefinitely. The intergrated ten centeses go to make up a fund which shall send the candidate obtaining the greatest number of votes to France in the interests of the American Committee for devastated France. The object of this Committee is the restoration of agricultural wealth, reconstruction of community life, nursing service and general medical care.



"BY THE ENTIRE COMPANY"

The Cast of "The Sun Temple"

ATHLETICS

THE B. A. A. GAMES

Institute athletics are operated on the principle of "the greatest good of the greatest number" and not for the purpose of producing winning teams. Nevertheless, if the teams do win, everyone rejoices. This year's B. A. A. games, held in the Arena on February 3, witnessed another addition to the truly creditable record of the one-mile relay team which has only lost three times in the last sixteen Annual Games. The B. A. A. is the climax of the indoor season so far as Boston is concerned, and as the victory was the fourth over Harvard in this event (as against no defeats by them), it was more than gratifying although the two-mile team finished last in a triangular race with Dartmouth home in front, and Syracuse second. The freshman mile relay defeated its three opponents, who finished in the following order: Dartmouth, Boston College and Holy Cross.

The mile event was marred by the misfortune of the Harvard Captain. Technology easily led from the start, Captain Smith being handed the baton as anchor man comfortably in advance. Captain "Billy" Burke fought to pass Smith, who successfully exerted himself to prevent the shift. Unfortunately, after rounding the last turn, Burke fell, after what was spoken of as "a game an attempt as ever seen at the B. A. A." Besides Captain Smith, the members of the team were: Tench, Joyce and Bateman, running in the order named with Captain Smith as anchor.

Smith and Bateman also ran on the two-mile team. The shortness of the rest period between the races and the fact that Coach Kanaly was obliged to so use them in both, accounts in a measure for the loss of the second race.

"Yard" Chittick, '22, who Captained last year's one-mile team at the B. A. A., finished 50 yards ahead of the Harvard anchor man. His team was composed of Poole, Smith and Gurney, none of whom ran this year. It is interesting to note that on February 5, 1923, Chittick, wearing the colors of the Newark A. C., won the 300-yard title in the Metropolitan A. A. senior indoor championship, held at Madison Square Garden.

MINOR SPORTS

This issue goes to press in the midst of the minor sport season and any complete or detailed summary

Past History of the Mile Relay at the B. A. A. Games

1908	Defeated Williams in 3:11 1/5
1909	Defeated Syracuse in 3:10
1910	Defeated Dartmouth in 3:11 4/5
1911	Defeated Dartmouth in 3:09 1/5
1912	Lost to Dartmouth in 3:14 2/5
1913	Lost to Dartmouth in 3:14 3/5
1914	Defeated Dartmouth in 3:10 4/5
1915	Defeated Dartmouth in 3:08 1/5
1916	Lost to Dartmouth in 3:07 4/15
1917	Defeated Brown in 3:12 3/5
1918	Defeated Harvard in 3:20 2/5
1919	Defeated Dartmouth in 3:12 1/5
1920	Defeated Harvard in 3:14 1/5
1921	Defeated Dartmouth in 3:47*
1922	Defeated Harvard in 3:35 2/5
1923	Defeated Harvard in 3:35

WON 13—LOST 3

*Error in distance accounts for time.

is impossible. Past experience proves that premature predictions are usually misleading in matters of this sort. To date the record is:

	Won	Lost
Basket Ball	4	5
Swimming	1	2
Wrestling	2	2
Hockey	2	4
Rifle Team	2	4
	11	17

Last year's jinx of a foreign court seems to hang over the present basket ball season. At home, they defeated Northeastern, Tufts, Clark and Holy Cross, while abroad they lost to N. H. State, Vermont, Wesleyan, Amherst and Mass. Aggies. Two losses to Wesleyan and West Point were suffered by the swimmers, but they then found themselves and

took Amherst into camp by a margin of three points. B. Y. M. C. U. and Brooklyn Poly were easy for the wrestlers, but Yale and Army found Tech equally easy for them. Captain Hereford and the N. E. Intercollegiate champion, Bruner, have not been defeated. In six shoots the rifle team netted 2972 points against their opponents' 2938. The boxers, who are not included in the above listing, opened their season on February 3 with a tie score against Colgate. Their schedule lists such strong competitors as Virginia, Yale and Navy.

THE INDOOR FOUR-A MEET

The second annual Indoor Championship Meeting of the I. C. A. A. A. will be held in the 22nd Regiment Armory, New York City, on Saturday, March 3, at 8:15 p.m. Abbot Southall, manager of the meet, has announced that mail applications for seats in a Technology section may be sent to the Columbia University A. A., East Hall, Columbia University.

SWIMMING

Swimming, under the captaincy of W. L. Stewart, Jr., '23, and as coached by Herb Holm, gives promise of being very successful. Some hundred men have turned out for Varsity and Freshman work. Races and time trials are well underway. The dashes are well taken care of by veterans. The breast stroke and dive both have specialists who saw service with last year's team. The plunge and the back stroke are the weakest classes at present.



EDITORIAL COMMENT



The Isolated Faction

This seems to be the open season for building programs. There is agitation for new dormitories, desperately needed. There are appeals for an adequate gymnasium. The Technology Club of New York is housed in quarters that are pitifully inadequate for its needs and it is at great pains that something should be done. Oddly enough, there is one necessity which has lately been urged not at all and which with the flight of every twenty-four hours becomes more pressing. The necessity is a new addition to the Cambridge educational plant which may house Technology's architects.

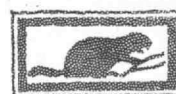
Perhaps one reason this necessity is not put forth is that the architects themselves are fairly well satisfied where they are. The present Rogers Building is well adapted to their needs, and geographically placed in a situation which seems to please them. Perhaps this pleasure of theirs is at the root of the entire difficulty. The architects are rapidly becoming a group apart, a group that some think cares to have little to do with Technology at large; and may very well come to have a constantly diminishing interest in Technology's problems, activities and affairs.

It is no exaggeration to say that there are some senior students in architecture who have not been in the Cambridge buildings for two years. The spirit is growing up among the students in Rogers that the Cambridge Technology is no more than a factory and that their own artistic pursuits can never blend with grubby research for proper moments of inertia or ion concentrations.

This is not well. Art is international, of course, and it matters little whether our architects bear the geographic stamp of Boston or of Cambridge. Yet the splendid isolation of one group of students by keeping them apart from contact with different minds and different modes of life, is bad for the students themselves and is making Technology a house divided against itself.

Once, by reason of their unique gifts, students of Course IV stood out as the leaders of undergraduate activity in their school. Today, they might be in attendance at Boston University for all the part they play in the affairs of their fellows. They no longer enter keenly into competitions with them. Socially and intellectually they move in a different sphere. Here in Cambridge we need their leavening influence. They need to realize more consciously that they are

part of a body of men in residence at a great school of applied art and science. Neither of these lessons can be taught until plans are drawn and ground is broken for an addition to the buildings on the Charles which can effectively replace the Rogers Building in technical equipment and traditional worth for Technology's students of architecture.



Capping and Gowning the Climax

At this writing, the senior class seems to be in a bit of a jam over caps and gowns at the graduation exercises. The bulk of the class complain that the oligarchy has rushed through a favorable vote at a packed class meeting. The oligarchy complains that after long and extensive publicity the bulk of the class simply remained away and left the matter, as usual, to those actively interested in Institute affairs. In this case, undoubtedly, the oligarchy is in the right. The bulk of the class deserve to have to abide by the results of the class meeting which they did not attend. They did not deserve the referendum which was offered them and which resulted on February 8, in a vote of 195 to 150 in favor of the decorations.

But the question is rather more extensive than one would imagine from typical talks with seniors. They are interested, chiefly, in having caps and gowns and more formality, and, secondly, in the question whether the large number of seniors who are at least hyphenate in their loyalties should have an equal voice with the old original, four-year, one hundred per centers in deciding these problems. Incidentally, one gathers from the long and eloquent communications in *The Tech*, some of them protest violently against hearing theses read any longer and no less violently against having to look at the Faculty on the platform. The implication is that the appearance of the Faculty on this occasion is one less befitting the dignity of Technology than the dignity of a sister institution in Scranton, Pa., where degrees are conferred by mail.

The referendum ought to effect one valuable result. It ought to bring the matter up for a permanent settlement by the powers that be. It is a fortunate year for the seniors' agitation. There will be an

inauguration as well as a graduation. Dignity at the one will most likely go hand in hand with dignity at the other. Nevertheless, there will be in the future many graduations without inaugurations. The question of graduation must be settled on its merits without reference to the more spectacular and infrequent occasion.

As a matter of fact, caps and gowns are only incidental. The first and greatest problem is that of a proper theater for the exercises. The Walker Memorial, seating at most and uncomfortably some fourteen hundred people, is inadequate in these days of large graduating classes. Everybody is crowded, the faculty on their narrow trestle, the seniors, the public jammed behind pillars at the side, in the balcony, standing perspiring in the rear of the room. There is no room for the dignity of an academic function, there are no acoustics except bad ones, there is inevitable dissatisfaction. As for a substitute place, it would be a bold man who would suggest again an out-of-door function, with or without a tent. The wind, the sun, the crowded camp chairs, the flapping canvas, the crunch-crunch of gravel as late comers wander on the outskirts . . . never again!

There remains, perhaps, Symphony Hall, or, perhaps, the Cambridge Armory, either one if properly equipped with the loud-speaking devices used in 1921. But sentiment apparently objects strongly to the exercises being held away from the Institute grounds. The only thing to be said, therefore, is that no dignity is possible, especially none of that dignity traditionally connected with an academic function, so long as we restrict ourselves to Walker. A larger auditorium is a *sine qua non*. Lacking it, caps and gowns, processions, invocations, music, a new program of events, all will go for nothing. Under the circumstances better keep to the old simple outline that can be improvised fairly adequately under any circumstances. The contrast between the real and the ideal will be less noticeable.

Yet it is perhaps a pity to give up so easily. A great many people feel the need of change. It is easy to understand the student enthusiasm for change; each class wishes to be a pioneer, to leave behind some permanent memorial to its enterprise. But many older heads, alumni and faculty alike, agree that there is no valid reason for keeping to an old custom merely because it is old. If our traditional form of graduation exercises were once a valid protest, an epitome of Technology as opposed to, say, Harvard, the day of that protest is long gone by. We are now virtually a university, having every year more in common rather than less with other schools. Our undergraduate life is becoming more collegiate; our curriculum, even, is not without that influence. Our students are feeling more and more that natural desire to be like other students, to have some of the traditional amenities of life that make a college man glad to remember he is

a college man. The old pride in being one of "a picked up lot," shown so touchingly by the Class of 1868 at the Dedication Reunion, is completely gone from the student body of today. They want to be able to show those men who are coming in greater numbers from other colleges that while we can still beat them in the essentials, we are no longer lacking in the accomplishments. Why not accept pleasantly and honestly that tradition of academic dignity that dates from the oldest pioneering universities of the Middle Ages and that still exists when many younger traditions are washed away in the flood that seems to seep at the foundation piers of our western civilization itself? In these days, any link with the historic past is something like an anchor against ruin.]

All this should not be left to the graduating class to settle, nor to the faculty alone, a faculty that as a whole shows a cynical indifference to all that the day and the exercises mean to the boys. It would seem to be a problem for another of those triangular committees that settled so successfully the far less important question of Junior Week. A committee chosen from the Corporation, the Alumni Council, the Institute Committee and the Faculty, if you can call that triangular. The current Committee on Graduation Exercises is not competent to handle the matter. A special, more representative group should be chosen for the purpose.

In 1917 a canvass of the faculty showed an overwhelming resistance to the idea of dropping the customary reading of theses regardless of what substitutes were proposed. The Review has a feeling that this resistance will prove as strong as ever. After all, the reading of theses is an essential, as the wearing of caps and gowns is an inessential. But it is still a discussable essential. The agenda for this committee should contain the following points.

1. The best available place for the exercises.
2. Academic dress for faculty and candidates for the degree.
3. The reading of theses, or as substitute, a commencement address.
4. The questions of invocation and music.
5. A method of giving out the diplomas or of sending them by mail.
6. A program for the whole day, as in many neighboring colleges, e.g., the graduation exercises in the morning, an alumni luncheon, and an alumni meeting at which relatives and friends may see the graduating class formally welcomed into the alumni body.

There, we take it, is a real agenda for such a committee to work on. Reform may not come this year, but this is as good a year as any, and better than most, to try it out. It will have to come some day, if the present temper of the undergraduates and some of their elders is considered. And it will do more than anything else can to pull our present ineffective and amateurish succession of events in Senior Week into some kind of dignified and traditional and permanent shape.

NEWS FROM THE ALUMNI ASSOCIATIONS

TECHNOLOGY CLUB OF NORTHERN OHIO

A dinner meeting of the Technology Club of Northern Ohio was held on December 16 at the University Club. There were present about fifty members. Primarily, the meeting was to be simultaneous with the Technology Clubs Associated—Alumni Association Dinner in New York so that Dr. Stratton's address could be heard by radio. A very elaborate radio receiving set had been built specially for the occasion by Charles F. Brush, Jr., VI, '17, and Dr. Charles B. Sawyer, '17, but unfortunately static conditions were such on that evening that Newark could not be heard.

Mr. George E. Merryweather, President of the Club, outlined the great work that Dr. Stratton had done for the Bureau of Standards and stated that he felt that the Institute was to be heartily congratulated on being able to get him to take the Presidency.

The evening was given over entirely to a general discussion of Institute affairs and much interest was shown, as well as a general feeling that Dr. Stratton would meet with great success.

The Club has lost through the death of Mr. Frederick Metcalf, II, '90, one of its most enthusiastic members. Mr. Metcalf passed away on December 8, 1922, after a brief illness. From 1898 to 1922 Mr. Metcalf was Treasurer of the Chase Machine Company, Cleveland, Ohio, engineers and machinists, specializing in automatic towing and mooring machinery for vessel use. He was also Vice-President of the Madison Foundry Company, Cleveland, Ohio, Vice-President of the Weldless Chain Corporation, Cleveland, Ohio, and Director of the Ludlow Typograph Company, Chicago, Ill. Mr. Metcalf was a member of the following Clubs and Organizations:

Society of Naval Architects and Marine Engineers, The Cleveland Engineering Society, The Cleveland Industrial Association, The Ohio State Board of Commerce, The Cleveland Chamber of Commerce, The Union Club, Cleveland, Ohio, The University Club, Cleveland, Ohio, The Mayfield Country Club, Cleveland, Ohio. He was also a sustaining member of the Alumni Association.

At one of the noonday meetings of workers for the Cleveland Community Fund, the principal speaker was Mr. C. F. F. Campbell, IX, '01. The meeting was a most enthusiastic one. "Community Fund" means to Cleveland, its combined efforts in behalf of all charities extended over a ten-day period each year, and in its army of workers can always be found many Tech men. Mr. Campbell is at present in Detroit where he is Director of the Detroit League for the Handicapped. His father was Sir Francis Campbell a widely known blind American, who founded the Royal Normal College for the Blind in London in 1872, and was knighted for his efforts in behalf of the handicapped.

The following announcement has been received: "Mr. and Mrs. Albert Gehring announce the marriage of their daughter, Ilse Marie, to Mr. Charles Henry Reed, on Friday, the 17th day of November, 1922." Mr. Reed is a graduate of the class of 1920 and is at present with the Forbes Varnish Company of Cleveland.

Mr. Charles L. Crosier, XI, '16, who has been with Morris Knowles, Inc., for some time, has recently been assigned to the Cleveland office of that organization with headquarters in the Hanna Building.

All Technology men in Cleveland and surrounding territory were deeply grieved to hear of the sudden death of Max Hellman, VI, 1896, on Jan. 20, 1923. As Vice-President of the Technology Club of Northern Ohio, he came into immediate and personal contact with most of the Tech men in and around Cleveland and always was vitally interested in them and in the Institute at large.

Mr. Hellman, at the time of his death, was president and Manager of the Lindner Company, one of the largest women's clothing stores in Cleveland. He founded this company fifteen years ago, and its standing and success are due to his efforts. He was interested in many civic activities, including the Civic League and the Community Fund and was a member of the Chamber of Commerce, the Oakwood Country Club, the Cleveland Advertising Club, and the Cleveland and New York City Clubs. Until

a year ago he was President of the Retail Merchants' Board of the Cleveland Chamber of Commerce.

In addition to being President of the Lindner Company, Mr. Hellman was President of the Hellman Realty Company; Vice-President and Treasurer of the Parsons Garment Company of Toledo; the France-Devin Company of Youngstown; the Gorton Company of Elmira, N. Y.; and the Tailored Women of New York.

Mr. Hellman is survived by his wife and three children.

Mr. G. M. Rollason, X, '13, metallurgist with the Aluminum Company of America, has been transferred to Detroit.

Mr. Kenneth C. Richmond, II, '17, has taken a position with the Stein-Block clothing interests in Rochester, N. Y., and has moved his family to the new location. The "family" now consists of Mrs. Richmond and a month-old daughter.

Mr. Philip N. Cristal, I, '17, has accepted a position with the Van Sweringen Company, railroad operators of Cleveland, and will assume his new duties on February 10.

Philip N. Cristal, '17, *Secretary-Treasurer*,
12th Floor, Marshall Bldg., Cleveland, Ohio.

TECHNOLOGY CLUB OF NEW YORK

Every week in every way the Monday night smokers are getting better and better. Already, we have run short of chairs and checking space, which is another reason for moving to the New Technology Club—but that's another story.

On January 8, through the courtesy of Walter Binger, '16, we heard Mr. Lawrence Langner, an eminent patent attorney of New York, who gave one of the most constructive discourses of the year. His hobby is the theatre and besides being the author of a volume of one-act plays he is the founder and moving spirit of the Theatre Guild, an institution which, in its short span of existence, has perhaps done more than any single producing management to raise the standard of contemporary drama. He gave a synopsis of "R. U. R.," the current Guild production and described the "Robots" of the play, synthetic creatures manufactured to do the world's manual labor, looking and acting like men but without appreciation or souls. Mr. Langner then asked if modern scientific and engineering education was not tending more and more to produce "Robots" rather than men, and suggested that unless drastic steps were taken, the economic system might so stultify the working man as to bring the present cycle of civilization to ruin. Using the fact that each man requires a hobby to afford his brain a necessary change of direction, he offered the following ingenious solution—that in every industry men be allowed to devote some part of each working day to the kind of work they liked best to do. He contended that such a change was essential to useful and satisfied existence.

The following week, Mr. Leonard Cronkhite, '05, a Rhodes Scholar, gave a resumé of the British University System and an appreciation of Cecil Rhodes in his wonderful career of Empire-builder. Mr. Cronkhite's unusual breadth of experience and delightful personality made the evening a very pleasant one.

On the evening of January 25, a crowd of unprecedented size heard Mr. Horace D. Ashton give a most interesting account of his travels in the hitherto unexplored cities of the Sahara, illustrated with some motion pictures taken by himself. His picture of a desert sandstorm, the first ever filmed, was only one of a number of thrills he presented in a splendid red-blooded tale of adventure.

But the Monday night talks are only interesting incidents in the life of the Club, which is enjoying a period of increased and increasing activity. The younger classes are in possession just now and bridge tournaments, chess and billiards are in full swing. The younger architects (twenty-six of them) had a dinner on February 3, and fairly bubbled over with good spirits. Professor Emerson and Harry Stearns came all the way from Cambridge to lend dignity (?) to the occasion. The Tech Show management has its New York headquarters at the Club and is holding weekly smokers. It is particularly hoped that out-of-town Tech men will drop in to say "Hello" when in the city.

Robert H. Scannell, '17, *Secretary*,
17 Gramercy Park, New York, N. Y.

TECHNOLOGY CLUB OF CHICAGO

Another month has rolled by, bringing us to our Winter Smoker which by the time this appears will have been a past event. Hugh Shirley, '22, is Chairman of the Committee and judging by present plans, February 8 will furnish plenty of copy for the April Review. We are looking forward, however, with considerable anticipation to our Annual Dinner, April 5, at which time we hope to have Dr. Stratton with us as our guest of honor. Every one wants to be on hand at that time to extend to our new President the hearty support of the Chicago Alumni. Very likely the Dinner will be at the University Club, but for the present our plans have not yet reached the point where any definite announcement can be made.

The attendance at the Tuesday lunches demonstrates that the Review is advertising them very well. There is seldom a lunch when we do not have a visitor from out of town. On January 16, Charles C. Bates, '03, of Vancouver, B. C., paid us a visit and gave us his views of the business conditions on the West Coast. Evidently trade has not yet reached the volume attained here in the Chicago market where orders for steel and cement have to be placed well in advance of time required.

On January 30, Ridsdale Ellis, '09, who has just returned from a four-month trip around the world, gave us an up-to-date talk on world conditions. Ellis on his trip, first visited South America, then England, and India, returning by way of the Pacific and the West Coast. Ellis had with him a splendid lot of pictures which proved to be of unusual excellence. His photographs of the Indian Temples and the Tas Mahal are the finest we have ever seen.

Despite the fact that we have had a remarkably open winter, our next inspection trip will be underground. On Saturday afternoon, February 10, E. L. Andrews, '94, will pilot us through the underground freight tunnels of the Chicago Warehouse and Terminal Co. This too, will furnish plenty of copy for the April issue. The underground freight tunnels are a big aid to Chicago in partly eliminating the trucking of coal and the removal of cinders from the large office buildings in the loop district, besides facilitating the delivery of all classes of freight from the various railroad freight terminals to their final destination.

Several newcomers have joined us at our lunches. They are R. W. Van Kirk, '21, from Boston, R. W. Pollock, '21, from Milwaukee and Charles E. Brokaw, '22, from St. Louis. When you are in Chicago be sure to take lunch with us at the Engineers Club, 314 Federal Street, on Tuesdays, at 12.30. You will find a real welcome awaiting you.

Robert W. Weeks, '13, *Secretary-Treasurer*, 323 South Wells St., Pennsylvania Railroad Co., Chicago, Ill.

TECHNOLOGY CLUB OF EASTERN NEW YORK

The usual monthly luncheon of the Club was omitted in December in view of the fact that arrangements had been made to have the Musical Clubs here on December 28.

The Concert and Dance given by the Combined Musical Clubs at the Mohawk Golf Club was a decided success socially,—and we are glad to add financially as well. The boys arrived shortly after noon and were guests of the General Electric Company at lunch. After lunch, several musical numbers were broadcasted from the Company's radio station, WGY. A tour of the G. E. works followed, which occupied the rest of the afternoon. In the evening, the undergraduates were dinner guests of various alumni and were then taken to the Golf Club for the Concert. After the Concert, there was dancing for which the Tech Jazz Band played. In spite of a heavy snow-storm the Golf Club hall was filled to capacity. Had it been a clear night, there would have been "standing room only." The "Clubs" left for Buffalo, about two-thirty a.m.

The January luncheon of the Club was held on the thirtieth and there were about twenty-five members present. Mr. Francis C. Pratt, Vice-President in charge of engineering of the General Electric Company, was our guest. Mr. Pratt is a graduate of Yale and he told us how a certain body of Yale alumni were co-operating with the University. This is a subject in which the Club members are very much interested and on which we hope to take some definite action in the near future.

We are always glad to have alumni from other places at our luncheons and if they happen to be in Schenectady, we hope they'll not hesitate to get in touch with us. Either Dick Harrington or the Secretary can be found at the General Electric Company.

E. D. Ryer, '20, *Secretary*,
419 Union St., Schenectady, N. Y.

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INDIANA ASSOCIATION OF THE M. I. T.

The Indiana Association of the Massachusetts Institute of Technology held its annual election of officers Friday evening, January 19. Mr. Joseph W. Stickney, '96, was elected President; Mr. Frank B. Shields, '07, Vice-President, and Mr. Edwin M. McNally, '18, Secretary-Treasurer.

Mr. C. G. Lasher, Indiana State Agent of the Home Fire Insurance Company of New York, was a guest of the Association at the January meeting, and gave us a short talk about fire insurance.

No definite plans are yet made for the coming months. We are all earnestly hoping that Dr. Stratton will find it possible to visit the various Alumni clubs throughout the country in the near future, as we are all very anxious to meet him and become acquainted with him personally.

Edwin M. McNally, '14, *Secretary*,
Allison Experimental Co., Speedway, Indianapolis, Ind.

DAYTON TECHNOLOGY ASSOCIATION

The annual dinner of the Technology Club of Dayton was held at the Dayton Engineers Club on the evening of Dec. 16, 1922.

After the dinner, the Club held a brief business meeting at which officers for the year 1923 were elected: President, Kenneth M. Lane, '17; Vice-President, Alfred S. Niles, '17; Secretary-Treasurer, Thomas B. Card, '21.

After the meeting, Col. V. C. Clark, Research Division of the Dayton Wright Airplane Co., spoke on Commercial Aviation. An attempt was made to receive Dr. Stratton's New York speech by wireless, but when the set failed to deliver anything more pertinent than fox-trots, the Club settled back to a discussion of Aviation.

Note: Club Luncheons are held every other Saturday noon at the Engineers Club of Dayton.

Thomas B. Card, '21, *Secretary-Treasurer*,
20 South Jefferson St., Dayton, Ohio.

TECHNOLOGY CLUB OF RHODE ISLAND

The Club held their regular January meeting on the eighteenth in the new rooms of the Providence Engineering Society on Washington Street. At our last meeting the Tech Club voted to accept the invitation of the Engineering Society to affiliate, so this was the first meeting in our new home. The rooms are well furnished and afford ample space for meetings, lectures and informal gatherings. Situated as they are in the center of the city, they make an ideal place for committee meetings and the sumptuous lounging rooms are ever a temptation to the well-known t. b. m. to linger awhile over the thrilling pages of the *Atlantic Monthly*.

The chief article of business transacted, was the decision to canvass the club for the purpose of obtaining a more general opinion, than the twenty members present could give, of the advisability of sponsoring a concert by the Musical Clubs of the Institute. It was a very interesting business session and many and varied were the arguments presented. When the smoke had cleared, the net result showed a unanimous vote to spread the canvass. There being no pessimists in the crowd, it was decided to hold the concert, if the idea was found feasible, on Friday, April 13.

Dick and Les had their usual unique entertainment ready when the budding orators at last agreed to adjourn and a hectic struggle ensued over a supposedly quiet game called military bridge.

Owing to the lateness of the hour, the game had to be made short and snappy. The idea seemed to be to overbid your hand in the hopes that your opponents would overbid theirs. The one who had the last word, usually lost. Real silk handkerchiefs spun by Japanese worms were the prizes which took part in the general blowout after the meeting. Those blowing were Messrs. Morey, Congdon, Mackenzie and Milliken.

Norris G. Abbott, Jr., '20, *Secretary-Treasurer*,
107 Providence Street, Providence, R. I.

WASHINGTON SOCIETY OF THE M. I. T.

The annual meeting of the Washington Society was held in the auditorium of the American Red Cross on the evening of January 30. Officers for the year 1923 were elected as follows: President, James A. Tobey, '15; Vice-President, A. B. McDaniel, '01; Secretary, Carroll Bennink, '99; Treasurer, W. C. Dean, '00; Member of executive committee, J. W. Clary, '96. F. E. Matthes '95, delivered a lecture on the Yosemite, which was illustrated with remarkable colored slides. This was also a ladies' night, so that many members of the fair sex were present.

The regular weekly lunches every Friday noon at the University Club have continued with their usual vim and vigor and the attendance is growing all the time. On January 5, P. A. Blair, '05, told the members about the deep sea mines used during the war; C. W. Perley, '96, of the Library of Congress, was the speaker the following week and described the workings of the library; Dr. E. E. Slosson delivered an interesting talk on the development of science from frauds and fakes of ancient days the following week; on January 26 we were fortunate in having Prof. S. C. Prescott of the Institute and Capt. John E. Wood, '14, of the office of the Engineer Commissioner of the District of Columbia. Among out-of-town guests at the lunches have been Dr. W. W. Bonns, '99, of Indianapolis and D. A. Tomlinson, '12, of Chicago.

Carroll Bennink, '99, *Secretary*,
Washington Society of the Massachusetts Institute of Technology,
Washington, D. C.

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TECHNOLOGY CLUB OF PHILADELPHIA

After our big affair of the Musical Clubs here on December 27, the Club has been resting on its oars awhile. Now, however, we are deep in the activity of preparing for our biggest meeting of the year, to be held on Wednesday, February 7, at which time Mr. F. J. Chesterman, M. I. T., 1905, Chief Engineer of the Bell Telephone Company of Pennsylvania, will speak to us on the subject of providing telephone service for Philadelphia. This talk with pictures will cover an outline of the problems involved and the method of solution, including the new machine switching central office equipment, which is now being introduced in this district. We are sending out over a thousand invitations to members of societies affiliated with the Engineers Club here in Philadelphia, inviting them to attend this big meeting of ours.

As a final wind-up of the Musical Clubs Concert held here last month, it looks as if the guarantors will be mailed about 40 per cent of their \$5.00 guarantee. This is not quite as much as we had expected to send them back, but we consider it a fairly good showing.

Our luncheons are running along about as usual. Last week we were very fortunate to have Mr. George Gibbs, of New York, Class of 1900, here as our guest. Mr. Gibbs was on his way from the South to New York, and brought us not only his charming company but also several new ideas concerning the activity of Technology in the Technology Club of New York. We are always pleased to welcome strangers in Philadelphia for these luncheons. They should either call on the Secretary or drop around to the regular luncheon at Wanamaker's Tea Room at 12:30 o'clock on Thursday.

Dexter A. Tutein, '17, *Secretary-Treasurer*,
1607 Real Estate Trust Building, Philadelphia, Pa.

TECHNOLOGY CLUB OF FALL RIVER

First let us say we all like the new Review and congratulate the editors.

The local roster shows we have very nearly fifty Tech men in and about Fall River. The active ones, those who answer to our call for dinner meetings and the like, are about half that number. This is not a very good percentage, but we are hoping for an improvement in the near future.

It was a real pleasure for all who attended our first meeting this season, on December 12, to have Bursar Horace Ford and Dr. George W. Morse as our guests. Bursar Ford enlightened us on the business side of the Institute and Dr. Morse described the activities of his new department of Hygiene, emphasizing the great need of intelligent medical supervision of the students and the urgent necessity of more dormitories.

The Combined Musical Clubs of the Institute gave a most successful concert here on January 5, under our auspices, for the benefit of local charity. The program was well chosen and considering that it was given just after the Clubs' strenuous Christmas trip, the Clubs performed admirably. Dancing followed the concert and we hope the local club demonstrated, through its members and friends, that we enjoyed having the Musical Clubs with us and wish them to come again. The concert netted \$275 for the local charity.

The officers of the Club for this year are as follows: R. W. Reynolds, President; A. D. Nute, Secretary-Treasurer; L. L. McGrady, Member of the Alumni Council.

The Members of the Executive Committee are: John Brown, W. H. Eddy, and George Darling.

A. D. Nute, '18, *Secretary-Treasurer*,
Technology Club of Fall River, Fall River,

THE Advisory Council on Undergraduate Publications is anxious to purchase copies of Techniques 1886, 1887, 1888, 1889, 1890, 1891, 1893, 1894, 1911, 1916 and 1919 which are needed to complete the files in the Technique Office. Address Room 3-108, M. I. T., Cambridge 39, Mass.

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NEWS FROM THE CLASSES

News from even-numbered classes is published in issues dated November, January, March and May. News from odd-numbered classes is published in issues dated December, February, April and July. The only exceptions to this rule are those classes whose Secretaries have guaranteed the appearance of notes in every issue. These classes are: 1896, 1901, 1902, 1907, 1910, 1911, 1912, 1914, 1915, 1916, 1917, 1918, 1920, 1921 and 1922. Other classes adhere to the alternate schedule.

Due to strict limitation of space, the Review is unable to publish lists of address changes of members of the association. When the address of any member is unknown, the Alumni Association office may be used as a clearing house. The alumni Office in Room 3-209, M. I. T., will supply a requested address or will act as the forwarding agent for any letters addressed to members of the association in its care.

1868

ROBERT H. RICHARDS, *Secretary*, 32 Elliot St., Jamaica Plain, Mass.

When two old folks like Mrs. Richards and I practically adopt a boy ten years old, he becomes the center of the family and everything we do and think revolves about him.

During the summer we spent June and July at Englewood Beach near Hyannis, and August and September at our little camp up in the White Mountains. One day, during our summer stay, Jim came running into my room and slammed the door in the bathroom. The camp has thin board partitions; the slamming of the door shook a brass kerosene lamp off its shelf and it tumbled down onto the mantelpiece, lying on its side with its head over the edge dripping oil onto the floor; in the meantime, the chimney had gone onto the floor and had broken into a thousand pieces. A little later, Jim was seen on the veranda talking to the mountain; he said, "I did a dismeneanor, I did a dismeneanor."

He is very bright and is very much inclined to act the clown before the class because he enjoys hearing them laugh. This got to be so bad that we got word of it from the school-teacher and each of us gave him an individual talk to try to persuade him to do better. The next word we got from the school was that he was a perfect angel and the best child in the class. He remarked to me the next day that he thought it a great deal more "satisfactrier" to work with the school than against it.

They had an intelligence test the other day at the school and Jim, who is ten years old, came out of it with a mentality test due to fourteen years.

The other day, Jim heard that "Hamlet" was going to be given by Hampden. He immediately said that he wanted to go and hear that very much. I replied that we had got to cut off that and other things because our income was so small and our expenses so high. He thought it over that night and next morning he came to me and said, "If I will buy the tickets to Hamlet will you take me?"

We think in the light of these incidents that Jim is getting an insight into the relation of cause and effect.

The following is an extract from a letter by our classmate, Nathaniel W. Appleton:

"Quite interested in what from time to time you have written in published articles about Jim. Having no children of my own, am always interested in a true boy. I was a boy once and old as I am I have not forgotten the days of my boyhood. In fact, can distinctly remember marked happenings when I was less than four years old. A good many years ago — and yet I can see plainly in my mind that part of Danvers, Mass. (now called Peabody — where I was born), exactly as it was. As a boy is at four years old, so will he be (inwardly if not outwardly) when far down the hill of life. That is, if well. Some of his interests will follow him.

"How astonished people of our boyhood would be now, at the Radio, Telephone, Automobile, Flying Machine, etc."

1878

E. P. COLLIER, *Secretary*, 165 Winthrop Road, Brookline, Mass.

The Annual Dinner of the Class of '78 was held at the University Club, Boston, Saturday evening, Jan. 20, 1923.

There were present: Bradford, Collier, Higgins, Longfellow, Rackemann, Robertson, Rollings, Schwamb and Williams. Letters were received from Adams, in San Francisco, and from Allbright, in Chicago.

The evening was spent, as usual, in reminiscent talk, and the gathering broke up at about ten o'clock.

John Warren Sargent, one of the most expert designers of stationary steam engines in this part of the country and the designer of the Rice & Sargent engine, which a quarter of a century ago gained considerable reputation, died at the Hope Hospital yesterday morning, after a brief illness, in his 66th year. During the last few years Mr. Sargent has devoted himself to research work upon problems connected with prime movers.

Mr. Sargent was born in Amesbury, Mass., in 1856, and, after a public school education, entered the Swampscott Machine Co., at South Newton, where he learned the machinist's trade. Later, he entered the Class of '78 at

Technology, but left at the end of his second year to take a position with the William Cramp's Shipbuilding Works at Philadelphia. He was later employed at the Dixon Manufacturing Company, Scranton, Pa., where he eventually became chief engineer and designer.

In 1895 Mr. Sargent came and with a Mr. Rice, who died about two years ago, formed the Rice & Sargent Engine Company and began the building of the Rice & Sargent engines. Later, the business was conducted as the Providence Steam Engine Company and, later still, as the Providence Engineering Company, Mr. Sargent remaining with the concern until he began to devote himself to research work. During his connection with that concern, he directed the construction of a number of the largest steam engines operated in the country, many of which were entirely or in part from original designs prepared by him.

Mr. Sargent was a member of the American Society of Mechanical Engineers and of the Providence Engineering Society and was also a member of the Providence Art Club. He made his home at 300 Benefit Street and is survived by one sister, Miss Mary W. Sargent, of Amesbury.

The funeral was held at 12 o'clock on February 1 from the parish house of the First Congregational Society, Benevolent and Benefit Streets. Burial was at Amesbury. The class was represented by Collier, Robertson and Schwamb.

1882

WALTER B. SNOW, *Secretary*, 115 Russell Ave., Watertown, Mass.

In accordance with the plan suggested at the Fortieth Reunion in June last, the Forty-first Anniversary was celebrated on the day of the Alumni Dinner. At 12.30 on January 13, twelve members (Brackett, Duker, French, Herrick, Gooding, Jenkins, Keyes, Munroe, H. F., J. H. Ross, Snow, and Walker) sat down to lunch at the Engineers Club. A portion of this number made up a theatre party in the afternoon, while four (Duker, Munroe, Snow and Walker) attended the Alumni Dinner at the Walker Memorial in the evening. The bright feature of the occasion was the presence of Duker, from Baltimore, for whom it was the second meeting with the class since the old days. Johnson wired from Los Angeles, "Mighty sorry I cannot meet you on the thirteenth, but it is mostly your own fault. You should not live so far away. It takes considerable to pry one away from this section but I am looking forward to the Fiftieth Anniversary. Congratulations for new President." Brackett's address is now 127 Browne Street, Brookline, Mass.

1884

HARRY W. TYLER, *Secretary*, M. I. T., Cambridge, Mass.

William A. Whitney of Sunapee, N. H., died at the Peter Bent Brigham Hospital, Boston, in November, following a major operation. While Whitney had not been well for several months, the seriousness of his condition had not been appreciated until shortly before his death. He was born in Boston, Dec. 12, 1861, entered the Institute with the Class of 1884 and after an interruption, due to ill health, graduated in Civil Engineering in 1887. After a period of professional work in Maine, he joined an uncle at Claremont, N. H., in developing the Emerson Paper Company of Sunapee and has since been actively connected with the management of the mills until their sale a few years ago.

While a resident of Claremont, Mr. Whitney was active in the affairs of Trinity Church and was a member of its choir. He had since his removal to Sunapee been prominent in all the best activities of that summer resort; President of the Board of Trade, Secretary and Treasurer of the Yacht Club, Trustee of the Library, etc. He is survived by his widow and a son.

A recent note from Bonillas reports a visit to New York in November. He is at present located in Nogales, Arizona.

The death is reported of James Gregory Carleton at the Salem Hospital in December. Mr. Carleton was born in India of a missionary family, attended the Institute as a special student, became a mining engineer and subsequently assistant to the President of the Hudson River Day Line. So far as the Secretary is aware, he has had no active connection with the Class of '84.

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1884 Continued

A recent letter from F. C. Williams, Sheridan, Wyoming, indicates that while he is doubtless a confirmed Westerner himself, he has a daughter in Goucher College, Baltimore, and a son in the Episcopal School at Alexandria, Va. His own present activities include golf, chess and "fun as a shiner." (The Secretary hopes this last does not mean that W. has become a Klegle or an Imperial Wizard.)

1886

ARTHUR G. ROBBINS, *Secretary*, M. I. T., Cambridge, Mass.

The Secretary has received word of the death of Jason T. Draper on November 28 last.

After graduating from Boston University in 1884, Mr. Draper took up the study of Chemistry at the Institute. After leaving the Institute he taught Chemistry for several years in various high schools in the South and West.

In 1897 he was appointed teacher of Chemistry in the Holyoke, Mass., High School. For the next twenty-five years he was in charge of the work in that department.

Last June he resigned and was retired on a pension.

1888

WILLIAM G. SNOW, *Secretary*, 112 Water St., Boston, Mass.

The Secretary regrets to report the death of Alexander L. Kean of Livingston, N. J., which occurred on Nov. 28, 1922 in the Memorial Hospital, Orange, N. J., after an illness of two years.

He was a member of one of the most distinguished families of New Jersey and New York.

His home was Livingston House, an estate in Livingston, N. J.

He was born at Ursino, near Elizabeth, where the family still has an estate. He was interested in biological studies.

He established St. Peter's Episcopal Chapel on his estate and maintained it, but opened the chapel to attendance of the township.

Recently he started building a church on the estate to be used as a retreat for aged rectors. During the war, Mr. Kean offered his services to the Government and was placed in charge of a bureau for the examination of foreign language newspapers. He organized a Committee of Mercy, which established three beds at St. Barnabas's Hospital, Newark. He also obtained the services of a military instructor for youths in the vicinity of his home.

He leaves two brothers, Hamilton and Julian H. Kean, President of the National State Bank of Elizabeth and four sisters, Mrs. W. Emlen Roosevelt and the Misses Lucy H., Susan L. and Elizabeth d'H. Kean, living at Ursino.

He was unmarried.

1890

GEORGE L. GILMORE, *Secretary*, Lexington, Mass.

At the recent suit of the Pierce-Smith Converter Company against the United Verde Copper Company, involving the patents for treatment of copper matte in the basic lined converter, Charles Neave of our class was counsel for the defence. Six other Tech men were also participants in the case, which took place in the Federal Court District of Delaware, at Wilmington, during the week of December 11th.

John B. Blood's address is "The Benedick," Washington, D. C. — J. Edgar Borden's address is 58 Summer Street, Portsmouth, N. H.

Calvin W. Rice was one of the lecturers the last week in December, in connection with the American Association for Advancement of Science held that week at Tech. His subject was "Engineering and Scientific Development in South America," and was illustrated with slides and movies of his recent trip to that continent.

At the Tech Club's Associated reunion in New York, the following members of the class were present at a class luncheon: Roberts, Lenfest, Nimms, Schieffelin, Hill, Waite, and Rice. These men, with John Towne, were guests at the Dinner in the evening. At the luncheon, a resolution was passed to advise President Stratton of the special desire of the Class of '90 to help him in his work.

We regret to report the death of our classmate, Fred Metcalf of Cleveland, where he passed away on December eighth. In September, Fred with Mrs. Metcalf visited Leonard Metcalf at his mountain aerie in Colorado, and was in very good spirits. He was, however, having a little trouble at that time, but the mountain air seemed to have arrested it. Upon his return to Cleveland, the trouble recurred. He put himself in the hands of specialists, and it was found that the trouble was due to his teeth. At the beginning, seven or eight of his teeth were drawn, and he withstood the shock fairly well, which develops usually about five days after drawing the teeth. The condition of the roots was found to be very bad and it was thought that the jaw also might have been affected. At all events, he showed distinct improvement, and second group was promptly drawn. This time, he did not bear the shock quite so well, but he did sufficiently so, that upon his recovery a third group was drawn, and finally a fourth. The latter, however, proved too much for his system apparently, or perhaps it was that the actual lacerations gave greater opportunity for infection. However, about ten days before he passed away, his case became very alarming. Conditions grew rapidly worse, and the opinion of the surgeons was that his trouble was due to blood poisoning induced by the condition of the roots of the teeth, and was the cause of his death. He was unconscious at the last. A brief service was held at his home in

1890 Continued

Cleveland, after which his body was brought East for interment at Swan Point Cemetery at Providence. Fred had been married twenty-seven years; and the sympathy of the class will go to Mrs. Metcalf, who is still in Cleveland.

Frederick Metcalf was born in Providence, R. I., January 31, 1866, son of the late Alfred and Rosa C. Metcalf. He graduated from the Massachusetts Institute of Technology in 1890 with degree of M.E. He was treasurer of the American Ship Windlass Co. of Providence from 1895 to 1898. In the later years he removed to Cleveland, and has been treasurer of the Chase Machine Co. and the Madison Foundry since. After a brief illness he died on December 8, at his home on Adelbert Road, where he had lived for the last eighteen years.

He was a member of the Society of Naval Architects and Marine Engineers, Cleveland Engineering Society, Cleveland Industrial Society, Cleveland Chamber of Commerce, Union Club, University Club, and Mayfield Country Club. He is survived by his wife, Alice Butts Metcalf, and a brother, Ralph Metcalf of Tacoma, Wash.

At the outbreak of the war he contributed, refusing to accept recompense, one of his inventions, which the British Government declared proved their most effective defence against the submarine menace.

His associates in the Board of Directors of the Chase Machine Company paid the following tribute: "Frederick Metcalf, late treasurer of the Chase Machine Co., was our beloved friend and counselor. His passing, December 8, leaves us in deep sorrow. Modest, thoughtful, and a true gentleman, he always took a high and noble course in the solution of business questions constantly arising. We loved him!"

The *Cleveland Topics* of December 16th said: "The death of Frederick Metcalf, on Friday, the eighth of December, brought regret to all who knew him. His life was not for the public eye; he was the quietest and most unassuming of men, but he made himself felt by his high integrity, and by the strength and kindness of his character. He was a graduate of the Massachusetts Institute of Technology, and received signal distinction from the British Government in acknowledgment of the use of one of his inventions during the war. Lovable, dependable and sympathetic as he was, he will be remembered long and affectionately by those whose privilege it was to know him."

At the Annual Technology Alumni Dinner, held at Walker Memorial on January thirteenth, the Class of '90 was represented by Burley, DeWolf, Dodge, Goodwin, Rogers, and Roots; a very select bunch from the Class of '90, and from reports given by them, the rest of us who were not present, certainly missed a delightful gathering.

At the January Dinner in New York of the Technology Clubs Associated, the members of the Class of '90 assembled there, and sent the following letter to Dr. Stratton.

"Responding to the invitation in your recent address at the Institute, I transmit to you the most cordial offer of the Class of '90 to assist you in any capacity in your work at the Institute.

"This resolution was passed at the luncheon of the Class of '90 in New York on the occasion of your reception, but has not been transmitted until now, owing to my absence from the city.

"The class has an especially alert and live wire Secretary, Mr. G. L. Gilmore, Lexington, Mass., and can get you any talent at any time for any purpose. Irrespective of a natural pride in our class, which, of course, we think especially wonderful. I think you will find a most earnest desire to serve throughout the alumni. You will find that if you avail yourself of this service, it will be one of your biggest assets." (Signed) Calvin W. Rice.

1892

JOHN W. HALL, *Secretary*, 8 Hillside St., Roxbury 20, Mass.

And it came to pass that in the first month, the thirteenth day of the month, that the elders of the people and some women, to the number of about five hundred, gathered together in the city of Cambridge on the river Charles to do honour to the President but newly come to the Institute, and to sit at meat together (my meat was tough; was yours?) And of the tribe of '92 there came Harry Carlson, the chiefest of the elders, and with him, seated in the high places was Kales, called Billy (behold it is said that the chief people of the city of Detroit desire that he be made Mayor of that city). And of the wise men, at whose feet the young men sit to learn wisdom, there were Charles Chase who teacheth the young men of Tufts, yet sendeth his son to the Institute, Fuller, Johnston and Parks. Of the others, there were Curtin, Church, Metcalf, Johnson, J. F., Nutter and the scribe of '92. And when they had been seated but a short time, behold this tribe rose up in their places and with loud voices cried rackety, whack, ker-whack, ker-who, with three Strattons on the end, and after that, other tribes rose up and cried after their manner, but the tribe of '92 was the first to do this thing.

And after they had eaten and certain of the young men had played upon instruments of four strings and blown upon shawms and beat upon drums, and others of the young men had sung songs, did Harry Carlson rise up in his place and with wise words spake unto the multitude, and the words being interpreted were that the Institute expects every alumnus to do his duty, also if President Stratton give thee a thing to do, say not thou "let George do it," but do it thyself, yea, even more than he asketh. He did then call upon others to speak as it is written elsewhere in this scroll, and at the end of the speaking behold the assembly rose up and smote their hands together and cried out with a loud noise so that the sound thereof was like many waters, and they then each went to his home saying one to another, this is verily a man after our own heart. Selah.

1894

SAMUEL C. PRESCOTT, *Secretary*, M. I. T., Cambridge, Mass.

Secretary was much pleased to have a call a short time ago from Henry Swanton, who is now engaged in extensive horticulture on his Island Farm in the Kennebec River. After a very pleasant visit, Swanton very modestly presented a little volume of verses which he has written and collected in a small brochure. Many of these are descriptive of the Maine Coast, while others are picture characters who have attained local eminence in various parts of Maine and New Hampshire. Altogether, these constitute a very interesting collection and one which many members of the class will, no doubt, be glad to read. We shall surely have to count on Swanton for a poem at our Thirtieth Anniversary in 1924.

C. H. Johnson, from whom little has been heard in recent years, has sent in to the Alumni Office his present address. He is now located at Sarasota, Fla., Box No. 215. E. F. Hicks, who has been for some years with The Victor Talking Machine Company, is now located at No. 4837 Fairmont Avenue, Philadelphia, Pa.—A. G. Zimmerman is practicing architecture in New York, and his address is No. 12 Fifth Avenue.

Secretary is pained to be obliged to record the death of F. M. Lawrence, which occurred in December, 1921. Lawrence was always a loyal supporter of the class and although he did not stay through the four years and graduate, there was no one on whom we could more certainly depend for coöperation in every good thing pertaining to the Institute than he. He early went into the shoe business with The Plant Company, Roxbury, Mass., and rose to the position of General Superintendent of their factories. His death was unexpected, as he had, so far as known, been in good health continuously. Lawrence was a mason and was connected with a large number of business organizations.

N. S. Bean, who has been for seventeen years National Bank Examiner for the New Hampshire District and who, according to the *Boston News Bureau*, is considered one of the ablest bank examiners in the country, has been appointed chief National Bank Examiner in the Boston District and has entered upon his service in this capacity. Bean's office is now at 45 Milk Street. I am sure all members of the class will not only wish to congratulate Bean on his well-earned advancement, but will also understand and appreciate the qualities which have led to his promotion.

W. E. Piper, Clark, '03, and Lawrence, '09, have purchased controlling interest in the Tyre Rubber Company of Andover, Mass., and have installed machinery for the manufacture of rubber shoes. This combination of men is a difficult one to surpass, and it is doubtful if any trio who could be brought together in a business way have more knowledge regarding the rubber shoe business and the problems of their manufacture than do these gentlemen. The good wishes of the class will certainly go out to Piper and his partners in this undertaking, which appears an assured success from its start.

But six members of the class attended the Alumni Dinner on January 13th. These were, Phelan, Reynolds, Bean, Nash, Adams, and the Secretary. The night having proved unusually disagreeable, no doubt, kept certain members of the class away.

1896

CHARLES E. LOCKE, *Secretary*, M. I. T., Cambridge, Mass.

J. ARNOLD ROCKWELL, *Assistant Secretary*, 24 Garden St., Cambridge, Mass.

At the annual alumni dinner in Walker Memorial on Saturday, January 13, to welcome Dr. Stratton as President of the Institute, there were present: W. H. Chenery, Fred Damon, Will Hedge, Gene Hultman, Sam Hunt, C. E. Locke, John Rockwell, F. T. Rundlett and N. F. Rutherford. In addition, '96 was represented at the ladies' table by Prof. Elizabeth Fisher, Mrs. F. T. Lord (Mabel Clapp), and Miss Emeline Torrey.

Chenery is now permanently located at the Boston Public Library in Copley Square, where he states that he has at least a ten years' job ahead of him. The spiritual Chenery has not changed a particle, but the physical being shows a tendency to increased embonpoint.

Damon, Hedge and Rockwell reported themselves as busy. Rockwell's hardest job this winter has been to drive his auto through the piles of snow in Boston's streets. In his capacity as Chairman of the Alumni Committee on Athletics, he gave a talk recently before the students' New York Club.

Sam Hunt has been pursuing some business studies at Harvard, but has now completed this work and is ready to go back into harness again.

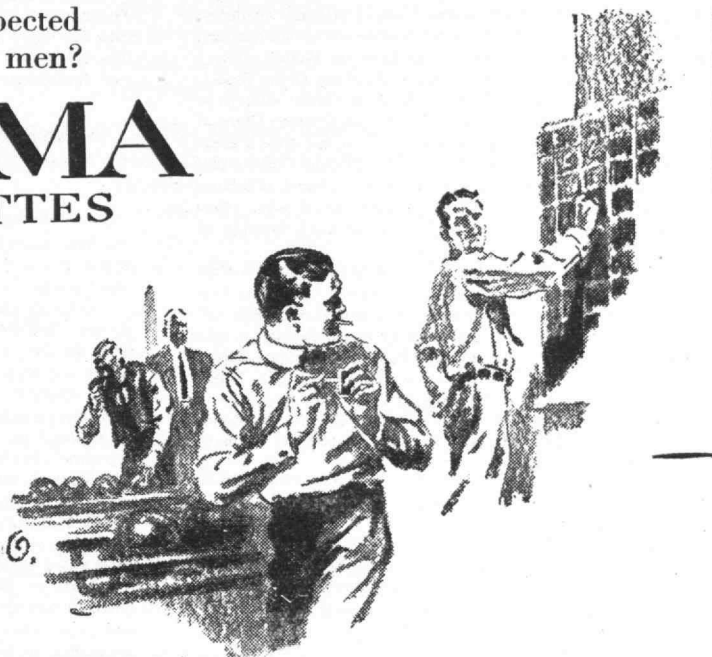
Rundlett was a new face, as he has not appeared at any class gatherings for many years. He took the course of Naval Architecture at the Institute but has not followed that profession. He is on the U. S. Revenue Staff connected with the Boston Custom House.

Rutherford took his life in his hands and made the trip to Boston for the dinner via the New Haven railroad and was optimistic enough to feel that he would get back to Falmouth safely the next day if he caught the first train in the morning. His strawberry and cranberry crops were both good this year and this winter he and Mrs. Rutherford are pursuing their usual peaceful existence in their hospitable house on the shore of Waquoit Bay, where the latching is always out for members of the Class of '96.

Hultman closed his summer house in Duxbury in the Fall and is passing the winter in his Beacon Street apartments. The most important recent item from family viewpoint was the fall of the pet Angora cat from the third floor window to the sidewalk below. Fortunately, the cat fell, true to form, and landed right side up, without suffering any permanent injury. Hultman, as Chairman of the Special Committee on the Necessaries of Life, has rendered

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1896 Continued

his annual report to the General Court of Massachusetts. In it, he has traced the attempts at governmental control and price fixing going back even to the decrees of the Roman Emperor Diocletian in the year 284 A. D. and coming down through the Middle Ages and including the corn laws of England and the bread laws of France and other countries. Without exception, such attempts have resulted only in failure. Hultman's entire report is a splendid exposition of the inexorable law of supply and demand as governing production and prices and shows the fallacy of control by government regulation which is called for by many who look upon it as the only real remedy for high prices and for present defects in our systems of production and distribution.

On January second, the Secretary was delighted to receive a call from Alfred V. Shaw or "Victor" as we commonly think of him. At present, he is engaged in developing a mining property at Silverton, Colo., which is called the Shaw Mines Corporation, being named after him. Although Victor studied architecture at the Institute, he never followed the profession, but his life work has been mainly along mining lines and he has operated in a great many mining districts. During the war he was on special work for the government and since his discharge he has been with the American Zinc Co., first at their East St. Louis plant, and more recently on the construction of their new plant at Columbus, Ohio. If he should ever find time to write an autobiography of his doings and adventures in various parts of the country, it would form a most interesting book. He has been on the go so much that he has never been able to attend any class meetings or reunions but hopes that sometime before he dies he may have an opportunity to show his face to his classmates again on one of these occasions.

Lou Morse, who is with the York Mfg. Co. at York, Pa., reports that not long ago he had a welcome visit from Charlie Stamp and Con Young, which was a combination of business and pleasure, in that Stamp was interested in purchasing a new hoist, while Con wanted to investigate the York golf links. As they had their wives along, their visit was most delightful and Morse hopes that some other classmates may be able to follow the example set by Stamp and Young.

Through George Merryweather the Secretary has received the sad news of the death of Max Hellman, which occurred on Saturday, January twentieth. He had suffered from some distress in his abdominal region and went to the hospital for observation. An operation was finally decided upon and for nearly a week there was hope of his recovery, but peritonitis set in, which left no hope. Hellman studied electricity here at the Institute and as he entered with advanced standing he was not so well known to classmates, especially outside of his course. He had been unable to appear at any of our class

reunions up to the twentieth, when he motored on from Cleveland to Saybrook. He entered into the spirit of the reunion and no one appeared to have a better time than he, and those of us who were there, were glad to see him again and felt, after the short reunion, that we had known him for years. He had expected to be on hand at our twenty-fifth reunion, and wrote the Secretary that he was very sorry to miss it, but that a trip to Europe, as the Secretary recalls it, absolutely prevented his attendance. Merryweather reports that Hellman has always been one of the most loyal and energetic rooters and boosters for Technology that they have had in the Cleveland district. If they needed his support for anything and he happened to be out of town, they always included him one hundred per cent with perfect assurance that it would be his wish. He had been working on a scheme of getting up a scholarship fund from the Technology district of Northern Ohio with the idea of sending a student every year if possible. His absence will make a big hole in the Cleveland Technology circle. The following account from the *Cleveland News Leader* gives a brief summary of his life and shows his high standing in the community.

"Max Hellman, President and Manager of the Lindner Co., died at Mount Sinai hospital early yesterday morning, following a week's illness of peritonitis. He was forty-seven years of age.

"Mr. Hellman has been for the last fifteen years one of the most widely known business men in Cleveland. He founded the Lindner Company fifteen years ago and made it one of the largest of Cleveland women's clothing stores.

"Though he was interested in many civic activities, including the Civic League, the Community Fund and a number of clubs and other organizations, he took part in the work of these organizations and liked best to be known among his friends for his business activities.

"The Lindner company under his management was a large user of the H. Black Co.'s Wooltex clothing, and Morris Black, head of that company, and Mr. Hellman were for years close business associates. Mr. Hellman was also an officer in clothing and other companies in cities outside Cleveland.

"Trained as an electrical engineer, Mr. Hellman spent years in that occupation, being for a number of years Vice-President and Treasurer of the Emerson Electric Co. of St. Louis.

"He left that firm in 1908 and came to Cleveland to go into the retail clothing business by organizing the Lindner Co. The firm was located at first on East 9th Street, removing later to its present location on Euclid Avenue.

"Besides heading the Lindner Co., he was President of the Hellman Realty Co., and Vice-President and Treasurer in the Parsons Garment Co. of Toledo;

1896 Continued

the France Devin Co. of Youngstown; the Gorton Co. of Elmira, N. Y., and Tailored Woman of New York.

"His home was 2828 Edgell Road, Cleveland Heights. He is survived by his wife and three children, Louis, Lenore and Arthur.

"He was a member of the Chamber of Commerce, the Oakwood Country Club, the Cleveland Advertising Club, the Civic League, the Cleveland and New York City Clubs, and other organizations. He also was until a year ago President of the Retail Merchants' Board of the Cleveland Chamber of Commerce and was a former Vice-President of the Technology Club of Northern Ohio.

"Mr. Hellman was born at Nuremburg, Bavaria, and came to America with his parents, Mr. and Mrs. Louis M. Hellman, in 1876, when he was a year old. His boyhood was spent in St. Louis, where he attended public schools and Smith Academy. He also attended Virginia Military Academy, studied electrical engineering at the Massachusetts Institute of Technology.

"He was married to Miss Helen Schwab of St. Louis in 1906."

Bob Flood was elected Vice-President of the Technology Clubs Associated at their December meeting in New York and he gave a short address at one of the evening sessions, bringing greetings from the Chicago Club, of which he is President. The men in Chicago say that Flood has done a great deal to re-awaken local Technology spirit and that the Chicago Club, under him, has progressed to the point where it represents a real live bunch of fellows and where the club activities are greater than for some years past. Paul Litchfield also came on from Akron to attend the New York meeting of welcome to President Stratton.

The Secretary saw Lucius Tyler on the street not long ago and Lucius reported that the problem which was occupying his waking hours was how to build a new \$7,000 house in Waban and not have it cost him over \$15,000.

The Class of '96 can claim some of the reflected glory which has come to Dr. G. K. Burgess in his election last spring to the National Academy. This is considered to be the highest scientific distinction in this country. There is no question but that George thoroughly deserved the honor.

New addresses received from the Alumni Office are Robert D. Flood, 226 West Adams Street, Room 216, Chicago, Ill., and Willard H. Colman, 66 St. Nicholas Place, New York City.

1898

A. A. BLANCHARD, Secretary, M. I. T., Cambridge, Mass.

At the present writing, February 3d, eighty-four favorable replies to the first notice of the Twenty-five Year Reunion at The Riversea Club, Saybrook, Conn., June 8 to 11 inclusive, 1923, have been received.

Of these, forty-two are unconditional acceptances and forty-two are acceptances subject to developments.

We have just learned of another son of ninety-eight attending Tech. He is Robert T. Dawes, son of Fred B. Dawes; he entered January, 1923, and plans to take the course in Electrochemistry. The other ninety-eight sons known to be at Tech are Lansingh in the Junior Class and Bragg and Barker in the Sophomore Class.

As usual, among our classmates, Roger Babson is foremost in the public eye. We could easily fill any issue of the Technology Review with his accomplishments, but we cannot refrain from commenting on his forty-minute radio talk the other evening to which we listened. It was broadcasted from WGI, Medford Hillside, Mass., and it was upon the "Business Outlook for 1923." The most adverse factor in the business outlook is selfishness and the striving to drive the other fellow to the wall. Babson would have everybody take thought of the other fellow's troubles and remember that no individual can thrive except as the community as a whole thrives. His talk might well have been delivered as a sermon from the pulpit of a church on Sunday.

Peavey does not appear so often in the headlines, but it is he who keeps the wheels of the Babson machine running smoothly. He is Vice-President of the Babson Statistical Organization; Trustee, Babson Institute; President Babson Park Company and President of Wellesley Press. He is in very great demand as a speaker on financial and economic subjects and we happen to have on our desk a notice of an address by him at Worcester on the "General Business Outlook."

Seth Humphrey is just starting for Hawaii, to be gone until the Class Reunion at the Riversea Club. He plans to settle down in a quiet spot there and work on his next book.

David L. Wing is to be economist in charge of obtaining production costs for the federal coal commission which was authorized by Congress to make an investigation of the coal industry.

Strickland has long been a successful automobile engineer, as the following clipping will show:

"William R. Strickland, recently with the General Motors Research Laboratories and for a number of years chief engineer for a well-known automobile concern, has joined the engineering organization of the Cadillac Motor Car Company as Assistant Chief Engineer, according to an announcement by the Company.

"Mr. Strickland has been actively connected with prominent concerns for a number of years as designer, engineer and chief engineer. He has served as chairman of the Cleveland section of the Society of Automotive Engineers, and vice-chairman of the S. A. E. standards committee. He is also at present chairman of their sectional committee on ball bearings.

"The new Cadillac engineer was trained in the Massachusetts Institute of Technology and afterwards served as engineer in the United States Navy at Mare Island, Hawaii."

Draper recently figured prominently as expert in the suit of the Pierce-Smith Converter Company, versus the United Verde Copper Company, involving the patents for treatment of copper matte in the basic lined converter.

The following clipping from the Salisbury, S. C., *Post* is interesting to ninety-eight:

"Salisbury will be exceedingly sorry to hear that Mr. and Mrs. A. W. Tucker are leaving the city soon, going to Raleigh, where Mr. Tucker is to be associated with St. Mary's college for girls in the capacity of Business Manager.

"While they regret most exceedingly to lose a good friend, fine fellow and worthy citizen, and his most charming family, friends of Mr. Tucker feel that he is going to take up a work for which he is most admirably suited. When announcement was made at the Rotary luncheon today, that Rotarian Tucker was to leave, there was a general expression of regret, but coupled with this regret of such a personal nature, it was, also, the consensus of opinion that St. Mary's had added just the right man to the forces which are making and sustaining this splendid educational institution."

1900

GEORGE CROCKER GIBBS, Secretary, 25 South Street, New York, N. Y.

No notes received from the Secretary.

1901

ALLAN WINTER ROWE, Secretary, 295 Commonwealth Ave., Boston, Mass.

The monthly grist of important and significant happenings to members of the class of '01 is somewhat meager. However, a few significant facts have been brought to light by the patient research of your Secretary.

Quite by chance our former classmate, George Anthony Hall, from whom no word has been forthcoming since the day he shook the dust of Technology from his feet, has communicated, indirectly, it is true, with the Secretary and I can place before you the following interesting points. George is the proud father of seven children, has left active pursuit of the ministry and is now in a position of responsibility at the Adams House. From conversation with him, your Secretary elicited the fact that he has had a wide academic experience, but the details are lacking.

A communication from Neddie Davis has arrived, presenting the following salient facts. Neddie is the Statistician for the Assistant Comptroller of the Scovill Manufacturing Company of Waterbury, Conn. Like Bill Pepperill, he lives in a post-office box, his number being 1217. As I remember Neddie's gracile and slender form freely it seems to me better within the bounds of possibility for him than for Bill. Somehow I feel Bill is holding out on us. Neddie's Department deals with various phases of the factory accounting and as he puts it, offers an excellent opportunity for a former teacher of Economics to get an interesting and valuable practical contact. Under the more or less intimate and personal details he informs me that he is still immune to the narcotic influence of the movies, but is true to the corncob pipe. Prohibition he dismisses with an airy wave of the hand. There may be more in this than meets the eye. For his sake, I certainly hope so, and I would earnestly recommend any wandering Christian in the Class of 1901 to hunt up post-office box number given above and get a little first-hand information.

Parenthetically, your Secretary could wish that the other members of the class would take heed to the example set and be a little more communicative.

Austin Hyde writes that he is still with the Walter Baker Company. The "Limited" which he appends to this pithy bit of information refers, I presume, to the text.

Alexander J. Taylor is Chief Engineer of the Delaware School Auxiliary Association in charge of the erection and construction of school buildings. In response to the searching inquiry for hints as to the inner life, he states with a calm conservation that after careful examination he cannot recall anything interesting.

Comment has already been made upon this exhibition of modesty in other members of the class.

It is with pleasure that your Secretary gives you an abstract of an interview with Frederic Roy Courtenay Boyd, President of the Class. Mr. Boyd, on being asked concerning his impression of Technology and its adequacy in preparing men for professional careers, made the following statement: "Tech is the place for men to work and not for boys to play," said Gen. Francis A. Walker, and this noble and elevating sentiment strikes a responsive chord within my breast. Furthermore, by spending four drab and colorless years unenlivened by any form of social contact or diversion one is thereby enabled the more fully to appreciate the broader opportunities of the world at large. Travel outside the confines of these United States—of particular interest during the last few years; comradeship—the enjoyment of aesthetic pleasures,—all of these open up a vista of unknown and unguessed allure in its color and appeal." "Yes," said Mr. Boyd, "in conclusion I would advise every young man to spend four years in Technology for the sake of the increased savor in life that this experience will give him. Gourmand rather than Gourmet, that is my verdict."

I am sure that many members of the class will appreciate to the full this little personal touch from the *vie intime* of our revered and respected President.

The following changes of addresses are noted.

Ralph H. Stearns is now at 52 William Street, New York City. His home address was given in an earlier communication from the secretary.—Harold B. Wood is at 143 Montclair Avenue, Montclair, N. J. By now your

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1901 Continued

Secretary feels certain that Harold has called upon every Technology man in New York, so this information may be redundant.—W. Fred Davidson is to be found care of E. T. Pettot of Cupertino, Cal. Your Secretary's meager knowledge of geography does not warrant his assuming that Fred has gone into the movies, although in these days, California has an ominous sound.—Julius E. Ober is with the West Penn Steel Company of Brackenridge, Pa. Times are evidently more prosperous.

1902

FREDERICK H. HUNTER, Secretary, Box 11, West Roxbury, Mass.

BURTON G. PHILBRICK, Assistant Secretary, 585 Boylston St., Boston, Mass.

The following classmates turned out for the Annual Dinner of the Alumni Association at the Walker Memorial, Saturday evening, January 13: Walker, Upham, Williams, Fitch, Kellogg, Taylor, Robinson, Hunter, Moore and Patch. Our voices were tuned up in a class cheer for Dr. Stratton and "a good time was had by all." On the Bowling alleys in the afternoon, Claude Patch had all the best of it with 102 and 105. If his middle string had run a little higher, he would have set up a fine three string mark. None of the other bowlers touched 100.

The January issue of the *Retort*, containing the Class Directory, went out about the middle of the month. Such a list is no sooner prepared than it becomes out-of-date in some point or other. A few changes and corrections are noted as follows:

Upham reports that the firm of Breed & Upham has been dissolved, and that he has started in for himself as E. L. Upham & Co., Wool Merchants, doing business at 184 Summer Street, Boston (residence and mail, 189 Mt. Vernon Street, West Newton, Mass.).

Miss Barbour Bruce is teacher of private classes, Louisville, Ky.,—mail address, Wessinger-Gaulbert Apts., Louisville, Ky.

Ralph E. Kimball is in charge of the Engineering Specialty Department of the Riter Conley Co., Pittsburgh, Pa.,—residence and mail address is R. D. 2, Box 34, Coraopolis, Pa. In addition to the family data reported in the Class Directory, he has a son, Jackson Kimball, born in 1921.

Harry G. Koch (Dutchy) is Architect and Engineer at 100 Iron Street, Milwaukee, Wis. (Note the change of number from the Directory list.) He was married in 1912, has a daughter, Dorothy, born the following year, and a son, Roger P., born in 1920. Another boy, Harry G., Jr., born in 1914, died the following year.

Norman Borden has been promoted to Lieutenant Colonel of Infantry in the Officers Reserve Corps. We hope peace will prevail so that the duties of this office will not become strenuous.

Francis J. Mague is living in Auburndale, Mass. We learn that he has recently taken a contract for a residence and garage in Newton, so he evidently is not confining his efforts to landscape work.

Farley Gannett was in Boston for a day last November. He expects to be on this way again before long, as he is to talk at the Institute to the students in Course XI. In addition to his work in the Engineering firm of Gannett, Seelye & Fleming, he is President of the Cayuga Rock Salt Company, which he reports is growing so rapidly that it requires strenuous attention to keep ahead of the possibilities of the development. He also reports that Irving Williams is at Chambersburg, Pa., with the Pennsylvania Railroad. We hope to have word direct from Williams for the next number of the Review.

Bill Kellogg is another classmate who is passing out words of wisdom to the undergraduates at our Alma Mater. Bill recently addressed a combined meeting of the Civil Engineering Society and "Corporation XV" (this latter is the professional Society of the Course XV "Engineering Administration"), on some of the problems encountered in marketing securities.

Professor Tyler informs us that Albert Hamilton is not deceased, as the Class Directory says, but that he is living in Pasadena, Cal.

If fame, as a celebrated English general once said, consists in having one's name spelled wrong in the papers, our classmate Durgin has achieved it. We quote the following from a communication in *Collier's Weekly*:

"We consider conservative the statement made by William A. Durgan of the Department of Commerce that \$1,000 is the per capita loss from wasteful methods of handling our economic affairs. Witness his report of over a million different varieties of shoes, 6,118 varieties of single-bit axes, 300 varieties of our flag,—none of them conforming to the standard,—1,100 varieties of piston rings, etc."

We think, however, that the work Durgin is doing will bring him more permanent fame than getting his name misspelled.

A Class Dinner in Boston is planned for early March—quite soon after these notes reach the public eye. Particulars will be announced by postcard notice to local men.

1904

HENRY W. STEVENS, Secretary, 12 Garrison St., Chestnut Hill, Mass.

AMASA M. HOLCOMBE, Assistant Secretary, 3305, 18th St., N. W., Washington, D. C.

The Secretary wishes to present to the class his apologies for being ill at the time when notes for the January issue were due. Said illness was not serious, nor lasting, but did interfere with secretarial duties.

1904 Continued

Under date of Nov. 20, 1922, Selskar Gunn writes from Paris: "My new address and title for your files.

"Very busy these days. Since November 1st, have slept six nights in Paris, two in London, one in Dublin, five in Rome and five on the train. Leave for Czechoslovakia on the 27th."

The above letter is written on the stationery of the Rockefeller Foundation, International Health Board, New York. Office in Paris, Selskar M. Gunn, Director, 3 Rue de Berri (VIII).

We are glad to know what Gunny's Paris address is, but after reading his letter, we are of the opinion that personally he does not use his office very much, and that a more appropriate address would be "Somewhere in Europe."

The following clipping from the *Batavia, N. Y., News* of Sept. 16, 1922, was somewhat late in arriving at our office:

"Charles Field of Fairport, a graduate of the Massachusetts Institute of Technology, Boston, Mass., with considerable teaching experience, has been appointed head teacher at the state school for the blind to fill the vacancy caused by the resignation of Daniel L. Hint of Middleport. He will arrive tonight and commence work tomorrow morning. He has been on the civil service appointment list for some time."

Dick Hale has been awarded the Distinguished Service Medal, as evidenced by an item taken from the *Boston Herald* of Dec. 8, 1922, which we quote below:

"Col. Richard K. Hale of 550 Chestnut Hill Avenue, Brookline, now connected with the department of public works in Boston, was today awarded the distinguished service medal citation for staff work in France during the war. Colonel Hale was in the field artillery officers reserve corps attached to the general staff.

The citation reads:

"For exceptionally meritorious and distinguished services as assistant chief of staff, G1, 2d army corps, from March, 1918, until April, 1919, he displayed exceptional ability in the organization and administration of that division of the corps staff. With rare tact he assisted in the establishment of most cordial relations with the British organizations with which the corps was serving. He showed excellent judgment and great administrative ability in the handling of important questions in the arrangements for the service of American troops with the British."

When the United States entered the war, Dick was a major in the Field Artillery of the Massachusetts National Guard. He went across with the 26th Division, and after varied service in France was eventually promoted to the rank of Colonel. He returned with the 26th Division, as Chief of Staff, and was mustered out at Camp Devens in April, 1919. Since the war, he has remained in the National Guard, and recently succeeded General Sherburne as Brigadier-General in command of the Field Artillery of the Massachusetts National Guard.

The medal was presented to General Hale at the Army Base in South Boston, early in January, by Major General Brewster, commanding the Northeastern Department of the United States Army.

The Class of '04 was well represented at the Technology Banquet held in New York on December 16 to welcome Dr. Stratton, the new President. The Assistant Secretary acted as official reporter, and his story of the evening follows:

"Sorry not to have seen you at the Technology Club's associated banquet in New York last Saturday. The fun started Friday night at the smoker, but I did not get there in season for that. If you want to know who was there, ask Mert Emerson. He participated in all the festivities and was the host at the '04 luncheon held at the Engineers Club. From the fragmentary accounts of the luncheon, I judge there were more '04 men present than at any of the other class luncheons given at the Engineers Club, and this unusual superiority in numbers was too much for Mert and his guests to keep to themselves so they broke in the luncheons of the other classes present and captured several goats.

"The reception was largely a ladies' affair, although here, as usual, Mert made his presence known. Bill Eager was there also with his wife. Selby Haar was the only other '04 man that I noticed at the reception, but as the place was pretty well filled with ladies, I may have missed a few classmates.

"The banquet was preceded on the part of many by room parties. P. M. Smith was host at our '04 room party. He lives at the Engineers Club, and has been there long enough to acquire all the usual and necessary equipment and stores. I suggest that you drop in on him the next time you are in New York, and thank him in the name of the class for his hospitality.

"The classes were grouped at individual tables seating ten. Ought Four was well represented by Emerson, Eager, Evans, Gill, Galusha, Blackie, Rowe, Smith and Prendergast in addition to the Assistant Secretary. We succeeded in pulling off the class yell several times and it went well. We all agreed it was the best yell of any class there. Mert tried to spoil our dinners by rehearsing his speech. Luckily he was the last one called on and we had a chance to polish him off in good shape, so he made a creditable showing for the class. He wants the Technology Club in New York to build a twenty-story club house, so that he and P. M. Smith can keep a suite there for any '04 men who stroll in. I favor this idea and hope you will pass it on to the rest of the class, as we are all of us bound to get caught in New York overnight some time or other.

"I hope you can glean enough from the foregoing to make a decent write-up in the Review. If not, you will have to pry the details out of Mert."

In accordance with the suggestion set forth in Halcombe's letter, the Secretary interviewed Mert Emerson regarding the smoker on Friday night and the class luncheon Saturday noon. At first, he refused to be quoted,

stating that all he could see in the report was the name Emerson. Technologically speaking, Mert is the most famous man of the class, so he must necessarily expect to see his name preëminent in the report of Technology affairs, and upon persuasion he capitulated.

He reports that the Smoker was a regular Tech smoker, that everybody had a good time, that there was lots of smoke and enthusiasm, and as far as he could remember the '04 men present were Don Galusha, Bill Eager, Selby Haar, P. M. Smith and M. L. Emerson. Further than that, he states that the Smoker was a record-breaker in one thing, it being the first time that Pret Smith had attended an alumni event since he became eligible to do so. Having taken the plunge, Pret finds that such affairs are not so bad and intends to take in some more later.

The Class Luncheon, Saturday noon, was held at the Engineers Club in collaboration or collusion with '05. The '05 men present were, Pret Smith, Galusha, Haar, Evans, Eager, Gill, Rowe, Prendergast, and, much to our surprise, M. L. Emerson. Ninety-five had about the same number present, and the luncheon was highly successful and much enjoyed by all who attended it.

In the conversation regarding the luncheon, it leaked out that an '04 Class Luncheon had not been planned and that this condition was learned by M. L. Emerson soon after his arrival in New York. He realized that this sad state of affairs must be rectified, so he hastily summoned Merton L. Emerson into consultation. They succeeded in locating M. Leslie Emerson, who suggested that Mert Emerson be invited to join the Committee on the '04 luncheon. On Mert's inclusion, he was immediately elected Chairman, and under his efficient leadership, the above-named Committee succeeded in putting over a most successful, though somewhat unexpected Class luncheon.

In closing Mert's account of the Smoker and Luncheon, he wishes to apologize to any who may have been present, but whose names are omitted, and to assure any such, that, upon presentation of properly accredited evidence of their attendance, their names will be published in a future issue of the Review.

Noel Chamberlain has opened an office for the practice of landscape architecture at 137 East 46th Street, New York City.

From time to time during the past seven or eight years, there have crept into print various items regarding a new departure in moving pictures, known as "Technicolor" or moving pictures appearing on the screen in perfectly natural colors. Probably all our class members know now that this wonderful achievement has actually been accomplished and that it is the work of our classmates, Herb Kalmus and Dan Comstock. The January issue contained an article regarding this production, but more information will be welcome and so we are including in these notes two newspaper articles, the first from a New York paper of September, 1922, and the second, from a more recent issue of the *Boston Herald*.

"William Travers Jerome, former district attorney of New York County, announces the formation of a syndicate of prominent business men of this and other cities who have subscribed \$1,000,000 for the development and perfection of a process of coloring motion pictures in their natural tints under a process invented by Daniel Frost Comstock, a scientist and engineer, for several years a member of the faculty of the Massachusetts Institute of Technology.

"Mr. Comstock has been working on the process for more than seven years and Mr. Jerome and some of his associates have been interested in it for more than two years.

"Mr. Jerome explained that this first five-reel film had been made largely as a sample, and that it was not the intention of the new company to enter the producing business. He said that it was the idea to sell the use of the patents to other moving picture companies and to color their films for them. Between fifty and sixty patents on steps of the secret process have been obtained in this country, and similar protection has been obtained in Great Britain, Canada, France, Italy and the Argentine. The same steps will be taken in all other countries as soon as possible.

"Under the process devised by Mr. Comstock the negative is developed just as an ordinary film, and then is passed through additional chemical baths and processes for the fixing of the colors in tints natural to the objects shown on the films. Mr. Jerome said that the cost of treating the film in this manner was negligible, and that he expected that at least 10 per cent of the moving picture films of the country would be colored in the future."

"Boston is particularly interested in the showing next week at Loew's State Theatre of the film, 'The Toll of the Sea,' from the fact that not only is it the first five-reel picture which has been done in natural colors, but because the perfect color process by which the picture was made is the invention of two Boston scientists, Daniel F. Comstock and Herbert T. Kalmus.

"This process has been characterized by motion picture producers as one of the notable achievements of the age, and they have invested \$2,000,000 or more in preparations to exploit 'Technicolor,' as it is called, which is destined, they believe, to revolutionize the motion picture industry.

"All the experiments in connection with the process were conducted in Boston and all films for use throughout the entire world are now being manufactured at the factory of Messrs. Comstock and Kalmus, 110 Brookline Avenue. Plans already completed provide for the erection of a big new factory which will have a capacity of 1,000,000 feet of film a week, assuring to this city a brand new enterprise that will cover the entire world."

The *Scientific American* has recently instituted an investigation of psychic phenomena, the object of this investigation being the production of a permanent photographic or physical record of such phenomena. Two prizes of twenty-five hundred dollars each are offered; one to the first person producing a psychic photograph, and one to the first person to produce an objective

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1904 Continued

psychic manifestation of physical character and of such sort that a permanent instrumental record may be made of its occurrence.

The investigation, or contest, is being conducted under the supervision of a committee of five judges, consisting of Dr. William McDougall of Harvard University, Dr. Walter Franklin Prince, Harry Houdini, Dr. Hereward Carrington, and our own classmate, Dr. Daniel F. Comstock. Dan is a member of the Advisory Scientific Council of the Society for Psychical Research. His skill in the design and use of special apparatus will be of invaluable aid to the committee in determining the reliability and authenticity of the manifestations produced by the competing mediums. A complete account of this most interesting investigation may be found in the December, 1922 and January, 1923 issues of the *Scientific American*.

The class representation at the annual banquet of the Alumni Association on January 13, was small but exact numerically, there being four present, to wit: Haley, Whitmore, Hayward and Stevens. Two others, Gus Munster and Ed Parker assured the Secretary that they would be present, but did not show up. Gus is purchasing agent for the Boston & Maine R.R., but he resides in Wollaston and is forced to commute on the New Haven, when the automobiling is bad. He states that he did not attend the banquet because he did not dare to take a chance on the evening service on the New Haven. Ed Parker has not presented an excuse, but he lives in Reading and it is to be presumed that he did not dare to take a chance on the evening service on the Boston & Maine.

Humphrey Haley has at last fallen from the high pedestal of honor which he has occupied since 1904. Up to December 16, 1922, he held the record of having attended every alumni function occurring since his graduation, no matter where these functions occurred. No other member of the class approached this record by a considerable number of events. But Hump failed to attend the banquet at New York on the above date, and so his proud 100% record is shattered. He still holds a record which will stand for a long time and he deserves a medal for it.

William H. Eager has been made President of the Whitman & Barnes Mfg. Company with which he has been so long associated.

It is expected that the annual reunion will be held at the Wianno Club on June 22, 23 and 24, 1923, but definite arrangements have not yet been completed. Further details of the reunion will be published later.

1906

J. W. KIDDER, *Secretary*, 50 Oliver St., Boston, Mass.

E. B. ROWE, *Assistant Secretary*, 108 Water St., Boston, Mass.

Eight members of the class attended the annual Alumni banquet held at the Walker Memorial, January 13th. They were: E. S. Chase, Charles

Kasson, Dan Kelley, Jim Kidder, John Monaghan, Ralph Patch, Oscar Pulman, and Ned Rowe. This 400% improvement over the attendance of the previous year was very gratifying and largely due to the efforts of Ned Rowe, who made numerous telephone calls in an attempt to round up the crowd. Ned's efforts also benefited '07 as he jitted Q. P. Emery of that class in from Wellesley along with Pulman. The latter is now with the Babson Statistical Organization at Wellesley Hills. The bunch seemed to enjoy themselves at the dinner. They advertised their presence by uncorking a "Six-Sixes" which was really very creditable, if we do say so. The effect of the yell upon the throats of the participants was alleviated by some new throat tablets, a product of Ralph Patch's, which bids fair to become more famous than "Zintabs."

In December, shortly before the All-Technology dinner in New York to President Stratton, we wrote to George Furness asking him to report the affair from an '06 standpoint. Under the date of December 18 a reply was received which read in part as follows:

"Upon my return to the office this morning, after several days' absence, I found your letter of the 13th instant, in reference to a report of the '06 men and their activities at the dinner to President Stratton. I am sorry that I am unable to help you because I did not attend this dinner."

We were glad to hear from George, but were wondering how we were going to square ourselves with Messrs. Lobdell and Hodgins, when the following arrived under the date of December 19 from Harold Coes:

"At the 'All-Technology' week-end in New York, December 15 and 16, a number of '06 men got together at various times. I am enclosing a card which shows the men present at the class luncheon at Keen's Chop House, Saturday the 16th. Andrew Keleher entertained us primarily with reminiscences of his experiences doing business in South America. It was a great pleasure to see some of the members of the class that we hadn't seen for some time. On the other card I am enclosing are signatures of those men present at the banquet given at the Biltmore in honor of Dr. Stratton. Some of the same men were present at the dinner in the evening that were at the luncheon. I was requested by my classmates to forward this information to you. We regretted that you were not in New York at the time to attend these meetings."

The cards mentioned included the following names, present at the luncheon: Otto B. Blackwell, Charles Breitzke, Harold Coes, Carl Emerson, Andy Keleher, Burton Kendall, Dick Polheimus, L. D. Smith and Wee Williams. Present at the dinner were Howard Barnes, Howard Brown, Harold Coes, Stewart Coey, Carl Emerson, Andy Keleher, Burton Kendall, Tony Manthesius, John Merrow, Raymond Ware and Herb Whiting. In other words, there were nine at the luncheon and eleven at the dinner, or sixteen different men, counting both functions, a very creditable showing for the New York '06 men.

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Class Outings Solicited

1906 Continued

During the class outing held in 1921, those present were asked to express opinions as to the frequency of future outings. The majority seemed to feel that an outing should be held at least every two years. On that basis, we should have a "get-together" this Spring. The subject has already been mentioned to some of the men, who seemed to be in favor of it. In replying to Harold Coes' letter of December 19, he was asked if anything was said about an outing during the New York celebration. His reply was as follows:

"Since the receipt of yours of the 26th ult., I have been laid up with the grippe for about a week, so have not had the opportunity to answer your letter.

"With regard to the last paragraph of your letter, a number of the men present at the luncheon and at the banquet expressed the thought that they would like to have an outing this spring, particularly those who attended the outing two years ago.

"Andrew Keleher, Herbert Whiting, Charles Howard and several others are very much interested. I met Herbert Terrill the other day at the Manufacturers' Club in Philadelphia and he asked if there was anything going on in this connection, so I am transmitting the information for what it is worth. I rather imagine that it is simply a question of getting a few people behind the program and the interest will be aroused and developed, but as usual somebody or several somebodies will have to take it on in order to get it started."

The Secretary would be very much pleased to hear from other members of the class in this connection. Please write and advise how you feel about it.

Charlie Wetterer, once having been a class secretary, sympathizes with the present encumbrant and assists by forwarding news items from time to time.

Under the date of January 10, we wrote to Charles, expressing our appreciation and received the following reply:

"Your letter of the 10th received. Monday was the first day in the office following a trip of a little over two weeks to Florida and Georgia.

"I was very sorry to miss the Alumni Banquet, as I had been looking forward to getting together with the fellows at that time. This noon I ran into Ralph Patch at the City Club and he tells me that you are planning on a Get-Together Meeting some time during the spring. I think this is fine and will be glad to do anything I can to help out in the matter. Just at present, I am snowed under with things that have piled up during my absence, but will get in touch with you a little later."

In the January Review we mentioned receiving a letter from Nash, who is now in Springfield. It is reproduced below:

"Are you planning on another '06 reunion this spring? You remember

at the last reunion a year ago last June it was decided to have another get-together this spring. If you are going to have a "get-together" of '06 men, let me know as soon as you can and I will try and get the '06 gang lined up.

"I see Harrington every little while. He is the same old bird and just got into me for \$10 bones for the A.A.A. Bill Messinger is still as lean and hungry looking as ever. Haven't seen Farwell for some time and think he has moved away, as the Hampden County Bridge on which he was the engineer is finished.

"If you know of any more '06 men in this vicinity, let me know, as I am in hopes of staging a miniature '06 reunion on our own behalf some noon here."

You will observe that Wetterer and Nash both mention the outing, so the sentiment seems to be crystallizing. There seems to be nothing left to do but put it over. Look for a more definite announcement in the May Review.

The '05 notes included in the January Review terminated with a reference to Jimmy Banash and his standing in the Alumni Association. This is an old question and needs no further comment on our part. We know Jimmy is a modest little violet and hates publicity. Otherwise, we might suspect him of looking for some free advertising. We size him up as having pep enough to divide between two classes and are always glad to welcome him to '06 functions.

In concluding, we might suggest a slogan, based upon that of the Class of 1911, which is a live class and particularly noted for the abundance of notes which they contribute to the Review. O. B. Dennison, who is Secretary, exhorts his classmates to "Write to Dennie." Why not adopt as our motto, "Write to Jimmy?"

1907

BRYANT NICHOLS, Secretary, 2 Rowe St., Auburndale, Mass.

HAROLD S. WILSON, Assistant Secretary, Manchester, N. H.

A letter from James M. (Jim) Barker, dated Dec. 30, 1922, tells of the arrival on Dec. 21, 1922 of his fourth child and third son, Ralph. Jim is Manager of the Buenos Aires, South America, branch of the First National Bank of Boston.—A new address for Arthur R. Jealous is F 59 DeGraw Avenue, Newark, N. J.—George A. Crane, 2031 First National Bank Building, Detroit, Mich.—The following letter from Harry L. Moody on the letterhead of the Westinghouse Electric & Manufacturing Company, 1442 Widener Building, Philadelphia, is of real interest:

"I have just received my copy of the current issue of Technology Review and apparently I have failed to advise you of certain changes in my work for the company. I am now Manager of our Central Station Division and am in charge of the company's entire relationship with public utilities in the Philadelphia district, which embraces Pennsylvania, New Jersey, Maryland, Virginia, Delaware, West Virginia and portions of North Carolina, Kentucky and Tennessee. I am also charged with the responsibility for the supply apparatus for the district, so that altogether the work I am now in charge of involves an annual business of approximately \$9,000,000 per year. Outside of that, I have nothing to do; but to date, it has certainly kept me on the run and I have every expectation that it will continue to do so.

"I certainly enjoyed to the limit our fifteenth reunion this last summer. It is an occasion that lives in one's memory for a long time afterwards, and I certainly would not miss one of these gatherings if I had to crawl there. Do you have any more class dinners? I am occasionally in Boston on business, and if I knew the time of a class dinner, I might be able to so arrange my plans as to attend. At least, I would make every endeavor to do so."

Technology men were prominent in the recent suit of the Pierce-Smith Converter Company, versus the United Verde Copper Company, involving the patents for treatment of copper matte in the basic lines converter. Neave, '90, was one of the counsel for the defence and Sage, Merton W., '07, was one of the counsel for the plaintiff.

1908

RUDOLPH B. WEILER, Secretary, Sharples Separator Co., West Chester, Pa.

LINCOLN T. MAYO, Assistant Secretary, American Motor Equipment Co.

161 Massachusetts Ave., Boston, Mass.

No notes received from the Secretary.

1910

DUDLEY CLAPP, Secretary, 40 Water St., East Cambridge, Mass.

No notes received from the Secretary.

1911

ORVILLE B. DENISON, Secretary, 63 Sidney St., Cambridge 39, Mass.

JOHN A. HERLIHY, Assistant Secretary, 588 Riverside Ave., Medford, Mass.

Lieutenant J. D. MacKenzie

December 15, 1922

"For conspicuous gallantry and good leadership. During the first phase of the attack he led his platoon to the final objective under heavy machine-gun fire. Two days later, when his company commander became a casualty, he took command, leading his men against machine-gun nests, and saving a critical situation on his left by forming a defensive flank."

Travel

In acknowledgment of the constantly increasing interest in foreign travel, the Technology Review inaugurates a set of pages on which will appear advertising of reputable concerns whose business it is to deal with some feature of this type of commerce. We recommend them for patronage.

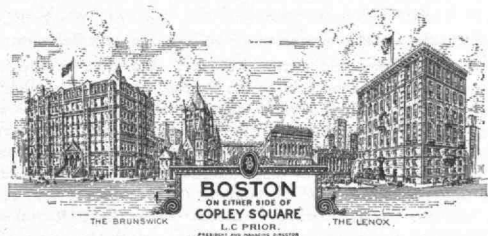
1911 Continued

"He was untiring in encouraging his men."

So reads the Deed of Action for the award of the Military Cross to Lieutenant J. D. MacKenzie. This was early in August, 1918, and on September second he was severely wounded. On Dec. 15, 1922, following an operation necessitated by the old wound, he died in the D. S. C. R. hospital at Ste. Anne de Bellevue, Quebec.

Thus passes one of our most beloved classmates. And only last fall "J. D." was down here in Cambridge and visited your Secretary one day, following a visit to the Institute. The outstanding feature of his life undoubtedly was his capacity for hard work. Coming to Boston at the age of sixteen he supported himself and studying at night school prepared to enter the Institute. He received his S.B. degree in June, 1911, and later, returning to the 'Stute on the geological staff, he earned for himself a Ph.D. degree in 1916.

While at Tech, cross-country and distance running appealed to him. Then, upon graduation, his efforts were indefatigable with the Geological Survey and the teaching corps of Cornell University and M. I. T. Even when he returned from the war, handicapped as he was with his service disability, he rendered yeoman service in the interests of the Canadian Institute of Mining and Metallurgy, where he was a member of the Administrative Committee of the British Columbia Division.



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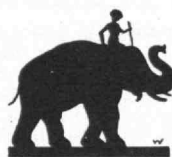
Boylston Street at Exeter

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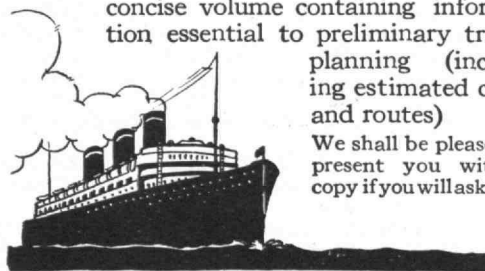
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1911 Continued

With all his capacity and avidity for hard work and lots of it, he had a keen sense of humour. His humour was whimsical and ever-present. And withal, he had a rare personality; his sincerity was admirable; and he will long be remembered and his passing mourned. Professor Lindgren said of him, "Had he lived, he would have ranked with the best of his science."

Major H. C. Davis, Jr., better known as "Doc," writes in from Watertown, Mass:

"A long silence is at last being broken by yours truly. I am here at Watertown Arsenal as assistant commandant of the Ordnance School, the special service school of the Ordnance Department.

"The school has two courses of a year each, one at the Institute and one here at the Arsenal, and has about twenty-five student officers in each course. The work is interesting and puts me in touch with the Institute staff, which of course has changed greatly since our day.

"To review a little: I fought the war at the great battle of Washington, not getting overseas at all. I went from there to Picatinny Arsenal, Dover, N. J., and was there about a year, coming from there up here the first of November last. I have accumulated since I left the 'Stute quite a family, two daughters, one nine years and the other fifteen months.

"I am still, again, or yet, a Major in the Ordnance Department of this man's army, and from the present attitude of Congress on the subject of preparedness in general, likely to remain as such for the rest of my natural life.

"Pete Gaillard is married to Miss Mona Blodgett of Washington, and has resigned from the army, and is now in Washington. I have seen very few 1911 men in the past few years, as my path seems to have lain in a different direction from theirs.

"Best regards to yourself and the rest of the bunch."

Harry Tisdale writes from Schenectady, N. Y., and states that he is most enthusiastic about his work with the American Dyewood Company, and is glad to be able to avail himself of the excellent services of the Technology Club of Schenectady, of which he is a member. He and his family are enjoying Winter Sports a lot this winter, he adds. He also wants to know if anyone in the class knows of a Tech man, interested in Textile Chemistry, who would like to follow it up in his company's factory with work in Dyewood Extracts, with the idea of going on the road as a salesman.

Whitford Drake, one of our XIII-A classmates, is now with the Winchester Refectory Arms Company of New Haven, Conn., while John L. Bagg is with the Millers Falls Paper Company at Millers Falls, Mass.—M. A. ("Aurora Borealis") Grossmann, formerly with the Electric Alloy Steel Company at Charleroi, Pa., is now with The Atlas Steel Corporation at Dunkirk, N. Y.—C. P. Kerr, another rosy-faced classmate, has joined forces with the Milford Electrolytic Iron Company, at Milford, Conn.—A very attractive brochure, entitled, "Do You Use a Chemist In Your Business?" has just been issued by the Werby Laboratories of Boston, of which company A. Benj. Werby, '11, is director. The company is listed as "Consulting and Analytical Chemists."

In closing, please give heed once again to the well-known three-word suggestion or appeal: "Write to Dennie!"

1912

F. J. SHEPARD, JR., Secretary, 568 E. First St., Boston, Mass.

"All of the Class of 1912 welcome Fred Montague Ferry whose arrival was announced in the last issue on December 18th. Mr. and Mrs. Ralph Ferry are now located in New Jersey.

At the Annual Alumni dinner in the Walker Memorial on January 13th, the following 1912 men were present: Doc Sloan, John Noyes, Weenie Schell, Clarence Morrow, Elliot Tarr, Angus Hammond and Fritz Shepard.

Hammond easily won the distance prize, as he has just returned from South America, in time to be with us. A more extended account of his doings will be published in the next issue.

Johnny Noyes won the second prize for distance, as he was on from Duluth, Minn., where he is District Manager for the Sullivan Machinery Company. Johnny was in Chicago for three years after leaving the Institute and then in Des Moines, Iowa, selling coal mining machinery. For the past five years he has been located in Duluth in his present position. He is Secretary of the Lake Superior Tech Club and reports that they are very active during the winter months. He boasts a family of four youngsters, two boys and two girls.

Clarence Morrow, who is now with Merrill Oldham, bond brokers, Congress Street, Boston, had an article in the February *Street Railway Journal* on 1923 Financing of Street Railways.

Ralph Stone, II, is still located in Cleveland as District Manager for the Sullivan Machinery Company.—W. F. O'Brien, II, is now Western Sales Manager for the Rome Wire & Cable Company, Rome, N. Y.—Brad Ross, X, is now Manager of the Minneapolis office for Billesby & Company, high grade securities.—Doc Sloan is now with the A. F. Robinson Boiler Works, Second and Binney Streets, East Cambridge, Mass. Doc has general charge of the plant and is kept extremely busy.

The following is an interesting account of the doings of W. G. Hammett, Course II:

He wrote from Lynchburg, Va., to the Editor of the *Chronicle*: "I have just received a letter from my old and respected friend John M. Campbell, of Cambridge, and a copy of December 23d issue of the *Chronicle* containing the very interesting article of Mr. Campbell's career, both of which I was glad indeed to receive.

"Mr. Campbell asks me to submit to you, as 'one of his boys,' a few lines concerning my activities since I left him at the Blake & Knowles shop nearly twenty years ago. I naturally feel a little hesitancy in writing anything about myself, especially since I have not accomplished anything noteworthy, but since the request came from Mr. Campbell, I will gladly comply.

"I started to work for Mr. Campbell as a boy in the Blake & Knowles machine shop under his direction for about eighteen months when I was transferred to the drafting department as a tracer and later, draftsman. In this department I remained until 1909, when I entered the Massachusetts Institute of Technology to take up mechanical engineering, having previously graduated from Lowell Institute. The latter part of my stay in the drafting department I had charge of one division. After leaving M. I. T., I became connected with the General Electric Company in Schenectady, N. Y., as engineer, where I remained about one year. I would perhaps have made my future home here, had I not received an offer to return to pumping work at the Henry R. Worthington's, Harrison, N. J., plant, where I took up my duties as designer and engineer. I was made assistant chief engineer about a year later at this plant and had charge of the entire engineering department comprising a force of about one hundred men, at the time I left this company in 1916.

"From Harrison, N. J., I moved to Lynchburg, Va., to become connected with the Lynchburg Foundry Company as Superintendent of their foundries at Lynchburg and in resuming operation of their Anniston, Ala., foundry. I was transferred there in 1919 as resident manager. This plant was later sold to local parties. Then I returned to the Company's head office in Lynchburg as Chief Engineer for their Lynchburg, Va., and Radford, Va., operations and where I am at present.

"The above, I believe, will cover the high points of my wanderings. I have, of course, travelled quite a good deal in connection with my work. The *Who's Who in Engineering* contains perhaps more dates, etc., of my moves, but I presume the above is sufficient.

"The best piece of engineering I have done was, perhaps in marrying a young Cambridge girl, a graduate of M. I. T. in chemistry Class of '06. She was born in Cambridge and in which city, I am glad to say, I lived a good part of my life. We have two boys, William Neil, a native of Newark, N. J., and Richard Jewell a native of Lynchburg, Va. We are training these little chaps to take a liking for Cambridge and later attend M. I. T. My wife's maiden name was Anna M. Cederholm.

"I am a member of the American Society of Mechanical Engineers and I have contributed a little to the engineering press. I am sending you under separate cover a reprint of an article in the *Engineering News Record*.

"P.S. I was a neighbor of Mr. Campbell in Berkshire Street for some time, but later moved to 1293 Cambridge Street. I was married in Belmont in 1912."

1914

H. B. RICHMOND, Secretary, 62 Tufts St., Arlington, Mass.

G. K. PERLEY, Assistant Secretary, 45 Hillside Terrace, Belmont, Mass.

Two meetings were held during January. The first on the ninth was the regular monthly luncheon held at the Boston Tavern. This luncheon was the first of a series at which several members of the class are to tell about interesting features of their business. G. W. Blakeley gave at this first meeting an interesting talk on asbestos and other heat insulating materials. The talk was of particular interest to those interested in building a home. Those present at the luncheon were H. S. Wilkins, C. H. Wilkins, Wylde, Crocker, Blakeley, Corney, Petts, Atwood, Johnson, Perley and Richmond. The annual Technology dinner was held at the Walker Memorial on the thirteenth. Those representing 1914 were Corney, Berry, Stump, Mackenzie, Swift, Duffield, and Richmond. This is the first time that we have had Tom Duffield with us since his return from Europe.

Another of our number has joined the benedict club as is evidenced by the following clipping from the December third *Springfield (Mass.) Republican*:

"A holiday wedding was that of Miss Anna R. Ricard of 68 Newton Street, Holyoke, and Raymond J. Cunningham, son of Mr. and Mrs. Thomas Cunningham of South Hadley Falls, Thanksgiving morning in Sacred Heart Church, Holyoke. Rev. William E. Foley, the pastor, performed the ceremony, also celebrated the nuptial mass. Following a wedding breakfast at Hotel Nonotuck, a reception was held at the Cunningham home in South Hadley Falls, it also being the 38th wedding anniversary of the bridegroom's parents, Mr. and Mrs. Thomas Cunningham.

"The young couple left for an extended trip to Canada. Mr. Cunningham is a graduate of the Massachusetts Institute of Technology and of Fordham University, and is engaged in the practice of law in New York City."

Vic Galleni is also soon to take the step. The following item is from the January 27th *Boston Traveler*:

"The engagement is announced of Helen Marie Tuohey, daughter of Mr. and Mrs. George V. Tuohey of Winthrop, to Victor Joseph Galleni of Somerville and Boston.

"The bride-to-be was born in Beachmont, and educated in Revere and Winthrop schools. She has been an attendant at the Lady of Lourdes Church, Beachmont, where she taught Sunday School, and was a member of the choir and a soloist on occasions for several years.

"Miss Tuohey has a wide circle of friends gained while traveling with her parents. During the war, she did much work in the liberty bond drives, and was honored by the British commission through her selection as a guest of honor on the tank Britannia when that machine made its appearance in Boston.

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1914 Continued

"Mr. Galleni was born in Riba, Italy, but came to this country when a child. He attended Elliot grammar and Mechanic Arts high schools, and was a Franklin medal winner. At the Massachusetts Institute of Technology, from which he was graduated as a civil engineer, in 1914, he attained a high rating in scholarship.

"At the outbreak of the war he joined the 301st engineers at Camp Devens, but was later transferred to the officers' school, at Camp Lee, Va., where he won his commission, and was assigned as an instructor in the engineer corps.

"After the war, he became associated with the S.M.I. Engineering Company in New York, and later at the Boston office."

Two of our number have broken into print recently. While reading the *American Legion Weekly* I came across an interesting communication on military ciphers and codes. I was greatly surprised when I found the article signed "Howard G. Borden, 52 N. Clinton Avenue, Trenton, N. J." The second article appeared in the abstracts column of the *Electrical World*. The original by E. C. Wente, VI, was entitled "Sensitivity and Precision of the Electrostatic Transmitter for Measuring Sound Intensities" and appeared in Bulletin B-7-1 of the Western Electric Co.

The *Iron Trade Review* for November 2, carried the following note: "Henry T. Chandler, X, metallurgist for the past two years with C. H. Wills & Co., Marysville, Mich., automobile builders, was born in 1890. He spent two years at the University of California and three years at the Massachusetts Institute of Technology, one year at the Sorbonne in Paris and one and one-half years at the Polytechnic Institute, Zurich, Switzerland, specializing in physics, chemistry and mathematics. Before going with the Wills company, Mr. Chandler was with the Ford Motor Co."

Your Secretary was very pleased to receive a visit recently from H. T. Bent. Not long ago Bent was listed as one of those who has gone into the radio business. Judging from the amount of material Bent's company was ordering from your Secretary, it was assumed that Bent had a full-sized company and had forever forsaken the shipbuilding business. But Bent tells us this is not so. He is still officially with the Newport News Dry Dock and Shipbuilding Co., but because of the extreme dull times he and several of the others connected with that organization are managing a radio supply company on the side. Bent stated that he had previously neglected to tell us that he was married in 1918 and has a two-year old son.—D. J. Stump has been bitten by the radio bug and has been in to see your Secretary about potentiometers and other items that go with this violent disease.

W. A. Snow reports that his recently established firm of Sandquist & Snow had a quite successful year. One of the buildings they put up was a reinforced concrete residence in Florida. Snow writes, "A wonderful building, fireproof throughout. Yours truly designed the reinforced concrete in the building

and it surely did make me think of the old days of Applied Mechanics." For a vacation, Snow drove up from Florida through the central part of the country to Cleveland, then through New England, and finally down the east coast to Florida.

Inquiries have been received as to where the change of address list has disappeared to. Ask the editors of the Review. They state that there is no longer space enough for it. Since this list is now defunct, your Secretary will be pleased to supply the address of any of the class when so requested.

1915

FRANCIS P. SCULLY, Secretary, 118 First St., Cambridge, Mass.

HOWARD C. THOMAS, Assistant Secretary, 100 Floral St.,
Newton Highlands, Mass.

The Secretary received the following letter from Bill Flanders on the letterhead of Hooker Electrochemical Company, Niagara Falls, N. Y.:

"Your letter has just been received, and I certainly wish that I could join you and the rest of the brothers on January 9th, when you have your get-together. I think the idea of getting together is a good one and that valuable results can be accomplished by it.

"I heard from Ross Rathbun the other day. He is in Cleveland and has three sons.

"Out of the list of those present at the last meeting, please administer my brotherly love in the approved fashion, provided they are there again, to Hallet, Ike Litchfield, Cliff Waldo, Stew Keith, Prof. Bugbee, Dennie and Chil. If anything has been heard recently from Lammy, Tom Lawler, Harry Catching, Jim Campbell or any of the other boys of about my time, I should like to hear of it. Ask Denny if he remembers the night he threw his Ingersoll through the window across the alley and Eddy Stuart if he remembers when he smashed lovely Venus, or was it Mercury, on the floor of his room, following notification that he had been recommended for a degree. Where is Howel Taylor, and does anyone remember the night that Lammy got chased home by a cop, also when Jeff Thayer was arrested while we were initiating him? In the words of Jim Campbell, 'Them was the Hellican days.' Yours in—
kai—"

McKeney Werlich, who dropped in last fall to pay an official call to the Editors of the Review—incidentally his first visit to the Institute since the Dedication—evidently enjoyed his stay both there and in the United States. His address is 3 rue Taitbout, Paris, from which headquarters he still is propagating American Locomotive Company products all over Europe. The following extract from a letter he wrote on his return to Paris is interesting:

"After leaving Boston, I went to New York for a day or two and then

1915 Continued

started to travel. Schenectady, Dunkirk, Buffalo, Chicago, Kansas City and the Grand Canon; each claimed a day of my most valuable time (valuable because I was on a vacation). I took in San Francisco, Los Angeles and Colorado along the coast, and in Los Angeles I had a chat with Brute (H. R. Crowell, '15, IV). He has not changed a bit and it certainly was a sight for sore eyes to see him. I understand that he just got back, in midsummer, from a year's trip in Europe. You know, he is married.

"On my way back from the coast, I stopped over for twenty-four hours with some friends at Fort Bliss. There, I ran across Frank Hastie, '17, XI. He looks much older than he used to when we were at the Institute, but his hair is just as red as ever. He is married and has a child.

"In Washington, I had a talk over the 'phone with Jim Tobey, '15, IX. I hoped to see him, but I was too much rushed.

"In New York, I went down to see George Gibbs, '00, I, in his diggings at the Seamen's Church Institute. He is doing very fine work, but I did wish that he were back on his old job in Paris.

"I covered some seventeen thousand miles during the nine weeks that I was absent from Paris, but I had to travel so hard that I did not have the time to see all of the Institute chaps that I would have liked to see."

Being unusually pressed for time, I am unable to include any further material this month.

1916

D. W. BARKER, *Secretary*, 14 Marathon St., Arlington, Mass.

WILLIAM W. DRUMMEY, *Assistant Secretary*, 533 Washington St.,
Dorchester, Mass.

Your Assistant-Secretary is very fortunate in being able to present you with valued information on many of your classmates due to the kindness of a few in sending in letters. Don Webster writes:

"You asked me for information regarding myself. I am in the public accounting game with Price, Waterhouse and Co., 60 State Street, Boston. My home address is unchanged, but I am living at 400 Charles River Road, Cambridge, which is more convenient. As there is nothing in my career thus far to rave about, you might put me down as enjoying the New England climate and deploring the state of affairs in Europe.

"Bud Kaula writes me, 'We only got back from our trip a week ago tomorrow (Oct. 24, 1922), so we were away exactly three weeks. It was a gorgeous time and everything went wonderfully. We reached Melbourne first and stayed there about five days, seeing sights, friends, etc. Our next move was to Tasmania, — overnight by steamer from Melbourne. In Launceston we lived like millionaires, having the so-called Prince's Suite at the hotel. This was the suite especially furnished for the Prince of Quails during his visit to Australia two years ago. From Launceston we went to Hobart by car. Going up Mt. Wellington we got into a flurry of snow, although it was very warm in Sydney; it was the first snow Edna ever saw. By the time you get this, I will have been away three years. Only another year or so and we will all get together for a grand reunion.'"

We are in receipt of an unsigned communication from Providence, but on it we think we see the "fine Italian hand" of Makepeace. It says:

"Arthur Stewart is doing great work for the Tech Club of Rhode Island. He is a member of their executive committee and has recently been engaged on an excellent little news sheet, which was sent out to all the Rhode Island Tech men.

"Hovey Freeman is rapidly getting to be a man of importance and affluence in this community, having been made a director in a National Bank of Commerce.

"Herbert Gfreorer, passing through here a few days ago, imparted the information that he is now teaming up with our old classmate, Jeff Robertson, who is engaged in the manufacture of stove-bolts, etc., in Taunton, Mass.

"We noted recently in a local paper that Mrs. C. W. Lawrence, of Pawtucket, won a cash prize for baking an excellent loaf of bread. Without seeming to pry into Lawrence's domestic affairs, we should like to ask Charley what happened to the 'dough.'

"We have been informed by one of her pupils, that Miss Elizabeth Pattee, has specialized in landscape architecture and is now teaching this and other allied subjects at a school in Groton.

"Your urgent request for some news regarding my own activities will have to pass unnoticed at this writing. I will say, however, that of late, they have consisted chiefly of two things, — shoveling snow, of which there is a great sufficiency and shoveling coal of which there is a very marked deficiency."

From Jack Burbank we have received one of those letters that makes us feel sure there is a Santa Claus. He encloses a letter from F. H. Dodge which says:

"Bruce Clarke can be found daily at the Western Electric Co. Works in New York. The last time I saw him he was diligently checking up and blue-penciling new scientific publications of the Bell System engineers.

"E. R. Mellen has forsaken pure engineering in his assumption of the duties of a commercial semi-manager at the Western Electric Instrument Co. in Newark. I understand he has a Wellesley 1944 element in his family now.

"E. A. Ekdahl recently returned to Shanghai. He may be reached at the Midland Packing Co., in Shanghai."

Burbank deserves a vote of thanks from you Readers for the letter we quote below:

"In connection with the dinner to President Stratton, we had a 1916 class luncheon at the Builders Exchange. The writer was appointed by

George Gibbs to round up the members of our class. Fifteen men responded — a surprisingly representative turnout. A brief status quo of the fellows will be interesting:

"Roger Lord, who is selling the best gasoline driven hoists on the market, lives in Yonkers, has an office at 51 Chambers Street and is the proud (most deservedly so) father of two boys, both two and one-half years old.

"Bill Shakespeare, living at 508 Hillside Terrace, South Orange, can tell you all about the manufacture and costs of oil cloths, being in charge of the operating department of the Standard Textile Products Company at 320 Broadway. Bill's two boys are three and one-half and one and one-half years old.

"George Petit, who gave up his messenger cap at the Barney Ahlers Construction Company to become chief engineer and office manager for the Chas. R. Hedden Company, builders, at Newark, N. J., has joined the rank of benedicts and seems to be thriving.

"W. T. Knieszner is still in the bachelor ranks and offers personal service to those who want advice on patent matters. He maintains busy headquarters at 50 East 42nd Street and can render service such as only those unattached can.

"A. D. Pettee, in the power distribution department of the New York Edison Company, is now married and has a daughter two months old.

"H. F. Dodge still walks the rosy path, having been married last July. He is a telephone engineer at 464 West Street.

"T. D. Burnap has survived Edison's tests and is in the Lamp Development department of the Edison Lamp Works at Harrison, N. J. — R. H. Mills is in the same work as H. F. Dodge — telephone engineering, trying to get telephone installation caught up with the population increase in New York City.

"Walt Binger, one of the men busiest in Tech affairs in New York, wants it known that he was married last June and understood that he is still married. From my personal knowledge, Walt has a charming wife and he seems headed for a happy servitude.

"George Sutherland challenges anyone to a game of tennis and boasts the best one-year old daughter in the class. George is assistant electrical engineer for the United Electric Light & Power Company at 130 East 15th Street.

"Herb Mendelsohn deserves congratulations on making a success of Consulting Chemical Engineering and on a family consisting of a wife, a daughter five, and a son two years old.

"Freeman Clarkson got in just in time to get a full meal. When he can spare time from his home and eighteen months' old son at Hillside, N. J., he works in the sales department of the Federated Engineering Development Corporation at 30 Church Street.

"Dick Ahearn and the writer are trying to keep the field organization of the Barney-Ahlers Construction Corporation supplied with work by almost continuous estimating. Dick is married, having been so since last summer. We are at Room 1103, 110 West 40th Street.

"Clark, Course VI, is reported with the Western Electric Company, New York City. E. R. Nellen is with the Western Instrument Company in Newark. Charles Glann is with the American Telephone & Telegraph Co. H. W. Ellis, married, is Assistant Manager of the National Lamp Works at Youngstown, Ohio. E. A. Ekdahl is in China with the Amos Bird Company working on dehydrating eggs.

"Steve Brophy was too busy making arrangements for the dinner to attend the luncheon, although he was much in evidence during the week-end affairs. He is with the Anaconda Company and lives at the Tech Club. Steve is trying to arrange a 1916 luncheon at the Whitehall Club monthly, on a Saturday. This deserves support from all near by.

"Eugene Lucas, though not at the lunch, was at the dinner and smoker. He lives near by, on distant Staten Island and has two children. I believe he is working on a proposition for heating residences without fuel.

"Win Swain lunched and dined with the Class of 1917, but joined our ranks for a time at dinner. Win is New York City's ranking Statistician, and can be seen now and then at the Tech Club.

"The writer is married and has a daughter just over three years old, and lives in Flatbush.

"I trust this letter will give you some material for the Review. If it does, the hours I've spent in writing have been worth while."

The Secretary, Barker, is hard at work trying to bring the '16 address file up to date and in beginning to make arrangements for the ten-year reunion. He makes the suggestion that the '16-ers about Boston ought to have dinner together, say once in every two weeks, and bowl or shoot a bit of pool, or craps, afterwards. The comments of the men who read this are requested.

1917

RAYMOND S. STEVENS, *Secretary*, 30 Charles River Road, Cambridge, Mass.

In marked contrast with the December gathering of the clan in New York, the annual dinner at Walker Memorial last month saw a sedate group of dignified alumni seated at the Seventeen table. Various reasons and excuses were given; there was the absence of the class executive who formerly distributed tin whistles and toys and led a boisterous group snakewinding through the hall; then there was the presence of one or two of the class who have achieved dignity and of army officers who have had dignity thrust upon them by an Act of Congress; but it was generally admitted that the class pep might have been more obvious had the class bootlegger been there.

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1917 Continued

A lower class persisted in practicing a weird howl—someone said it was a cheer—and no other group attempted seriously to compete. Even Seventeen, with one of the largest delegations present, contented itself with a few conventional cheers.

Following the official program, Nig Sewall told French Canadian stories concerning Jean Baptiste and his friends, after the general style of *The Habitant*, unexpurgated edition. Those whose sides ached in consequence were: K. E. Bell, X-A, Ted Bernard, VII, L. L. Clayton, XIV, Barney Dodge, X-A, Stan Dunning, XV, Bill Eddy, XI, C. T. Gilliard, II, Phil Hulberd, IV, Stan Lane, X, E. Levi, II, Lobdell, IV, H. L. Miller, VI, Dean Parker, X, J. A. Rogers, Jr., II, Ray Stevens, XV, Dad Wenzell, VI, and Jack Wood, X.

Rumors of long standing were confirmed. Walt Harrington, XI, is in the vicinity of Boston, and is with the Root Newspaper Association handling advertising for the *Dry Goods Reporter*. Austin Kuhns, X-A, has joined the force of the Farrel Foundry Company, and it is understood that he is covering territory in the vicinity of Buffalo. Dick Catlett has moved to Pennsylvania and is operating the Cal (Concrete accelerator) plant. According to the version of our informant, Mrs. Catlett and the two little Catletts went with him. His scout troop is hunting another scout master.

Weddings are a little scarce this month. The effects of the coal strike are far-reaching, but our most faithful contributor sent in the following from the Nashua, Iowa, *Reporter*, January 4:

"One of the prettiest festivities of Christmas Day in Grundy Center was the wedding of Miss Lucille Lamar and Mr. Everett Dean Wells, of Sioux City, Iowa, at the home of the bride's parents, Mr. and Mrs. John Lamar of Grundy Center.

"The bride is the only daughter of Mr. and Mrs. John Lamar of this city, a graduate of the high school in the Class of 1920, and a very capable and charming young woman.

"The groom is a son of Mr. and Mrs. E. J. Wells, of Nashua, Iowa, and is at present teaching in the science department of the Sioux City public schools. He is a graduate of Grinnell College, and the Massachusetts Institute of Technology and a member of the honorary scholastic fraternity, Phi Beta Kappa. During the war, Mr. Wells served as an instructor in aviation at Kelley Field, Texas."

From the *New Bedford (Mass.) Standard*, December 31, 1922:

"Mr. and Mrs. Charles Henry Brigham of Brookline have announced the engagement of their daughter, Miss Marion Ray Brigham, to Frederic Leslie Ford, son of Mr. and Mrs. N. Ernest Ford, 212 Hawthorn Street, this city.

"Miss Brigham is a member of the Class of 1924 at Smith College, where she is prominent in literary activities.

"Mr. Ford is a Technology man, who was graduated with the Class of 1917. He is a member of the Theta Chi Fraternity. While in Tech, he was active in the musical clubs.

"During the war, he was a research aeronautical engineer at the McCook Field Experimental Station in Dayton, Ohio.

"No date has been set for the wedding."

From the *Boston Globe*, Dec. 21, 1922:

"Lieut. Henry R. Lacey of the Engineer Corps, U. S. N., accompanied by his wife, sailed Tuesday from New York for Guam, where he will be on duty for the next two years. Lieutenant Lacey, who was transferred from the Charles-town Navy Yard, is the son of Mr. and Mrs. Frederick Lacey of 20 Sargent Avenue this city. He graduated from the Somerville High School in 1913 and from M. I. T. in 1917. He is a veteran of the World War and was appointed a lieutenant by President Harding."

Will wonders never cease! We are advised that Claudius Henry Mastin Roberts, XIV, has been busy getting out of the army. This dispels an illusion that we had fondly entertained. We had thought the great Claudius WAS the army.

Brick Dunham's drive for funds brought out many a touching sentiment, not the least of which was the following: "I am also going to clean up my contribution to the Endowment Fund shortly, in the hope that enough others will do so to improve the looks of the 1917 chart in the Review."—A. E. Gilmour, II, wrote from Jacksonville, Florida: "Before returning I intend stopping off at Savannah to interview Pete Newell with regard to his \$100,000 heiress. Will report on that later."—E. C. Mathews writes from West Sand Lake, N. Y.: "The most important thing about this letter is the check enclosed. I can't contribute any news as no Seventeeners ever find their way out to this town. Just at present, I am keeping busy as Superintendent of a mill making the Thermo Sport Coats, but I may locate near Boston some day."—Schoonmaker has been transferred from Fort Terry, New York, to Fort Totten, New York. He says, "I like it much better as it is in New York City instead of on an island. My son, Eric Elmendorf, was born on November 19th. He is a cute bird and looks like he was going to be a brainy engineer."

The '02 *Retort* (Vol. V, No. 1), says:

"The Class Detective has been demoted six numbers for failing to find out, when hunting up facts about the offspring of our classmates in seats of learning, that Gerald W. Thomson, son of our classmate, David P. Thomson, is already a graduate of the Institute. He took his degree with the Class of '17, and is now a Lieutenant in the Construction Corps of the Navy."

The receipt of the *Retort*, which was the Directory Issue, reminds us that we have on tap the recent addresses of most of the class and will be glad to forward any that may be requested.

STANDARD PLATE GLASS COMPANY

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BOSTON

—:—

CAMBRIDGE

1917 Continued

The activity and the recognition being awarded E. P. Warner, II, in the aeronautic field, are indicated by the following clipping from the *A. S. M. E. News* of January 22, 1923:

"Major Thurman H. Bane has been unable to accept service as chairman of the Aeronautic Division for 1923, and Prof. E. P. Warner, Massachusetts Institute of Technology, and Aeronautic Vice-President of the Society of Automotive Engineers, has been unanimously elected in his stead.

"Professor Warner has already rendered signal service to the Division in the conduct of the Aeronautic Sessions at the last Annual and Spring Meetings, and also as chairman of the Papers Committee of the Division."

Good old Ham Wood is alive. He says so. He has been Assistant Special Agent at Syracuse for the Great American Insurance Company of New York. He says, "Just a line to advise that my address will be 615 Hartman Bldg., Columbus, Ohio, after February 15, 1923.

"I have been offered the position of State Agent of the Boston Insurance Company and will handle the Ohio territory for that company, with headquarters at Columbus. Tip Phil Cristol off not to be surprised if I should drop into his office some day soon to inquire about sources of supply in Cleveland—the map shows it to be located fairly near the border. A stenographer in an insurance agent's office in Troy asked me one day this week if I wasn't just a little bit (just a little bit) fearful of going way out West among the cowboys! I ask you."

Phil Cristol, I, has resigned his position as Secretary to the President of the Cleveland Railways Company to become connected with the Van Sweringen brothers, but will still be located in Cleveland. The *Literary Digest* recently quoted the *New York Times* saying, "The outstanding romance of present-day railroad history is the rapid rise of two young Cleveland real estate men to what a Wall Street writer calls 'a stellar position among American railroad financiers.'" The *Digest* goes on to say that "railroad officials in New York hold that the progress of the Van Sweringens in railroad history has been the most outstanding of any group since the days of E. H. Harriman." They own the old Nickel Plate, the "Clover Leaf" and to this combination have just added the Chesapeake and Ohio, giving them an outlet to the Atlantic seaboard and a system worth more than \$500,000,000 with a total mileage of 4,565.

1918

JULIAN C. HOWE, *Secretary*, 551 Tremont St., Boston, Mass.

Each member of the class should have received a letter several weeks ago outlining the plans for the reunion in June, and calling for an immediate reply, stating whether or not he is coming. If you, reading this, have not attended to this matter, now is the time to fill out your post card and see that it gets mailed. For the benefit of anyone who has not received his notice from the Committee, there follows here a statement of the plans as they now exist. The reunion will take the form of a week-end party to be spent at the Cliff Hotel, North Scituate, Mass. It will start on Friday, June 15th, in the afternoon and will last through Sunday morning. There will be plenty of entertainment provided in the form of dances, dinners and outdoor recreation, the hotel being adjacent to a country club to which one of the members of the Committee belongs, and where he can obtain us the privileges. There will be tennis, golf and other sports as well as the use of the bathing beach. The expense for the hotel will be about \$7.00 a day, including all meals. If one stops to consider how much he would spend living at a hotel in Boston during the same length of time, it will be seen that the expense will compare in favor of the Scituate plan. In case you cannot get down for the full period, try to be there for at least one afternoon and evening. If each member of the class will start now to make plans to take his vacation in June, we should be able to make a very creditable showing at our five-year reunion.

Course I

J. R. LONGLEY, *Secretary*
Chamber of Commerce, Michigan City, Ind.

Good news comes from Walt Biggar from Boston town. Walt was for quite a while reported on the hospital list, but he says he is both well and happy now and thanks the Lord for being so. In June, 1920, he started to

work for Mr. J. H. Fuertes, Consulting Hydraulic and Sanitary Engineer of New York City. Chiefly engaged on a sewerage survey for the city of Elizabeth, N. J., for a little more than a year, he became ill and was laid up and "answered sick call" for the next nine months. Having staged a successful comeback with his health "in spite of the doctors," he parted company with the engineering profession, like other good 1918 men have done, and went to work for the Kroll Company, 33 Wormwood Street, South Boston. They specialize in the manufacturing of overalls and Walt says he started to learn to make overalls from the bottom up. He is now Superintendent of the plant and claims to be very busy.

Walt reports a visit with Henry Lacey, Lieutenant of the U. S. Navy. Lacey has been ordered to Guam and is leaving about the first of the year. He also provides the first news of Sam MacGregory,—that Sam has gone and got married. No wonder we could never get in touch with him. The last we heard of him he was in France swapping stories about a pet black cat that he and Mike Malley used to have in the M. I. T. Dormitories.

News from Bob Rowe from Salt Lake City shows that he has had some interesting travels. After a year of engineer officer's life at Camp A. A. Humphreys, he moved to Philadelphia and thence to Dayton, Ohio, where he worked with Mr. Frank Hill Smith as estimator and draftsman. During the period he was at Camp Humphreys, he was married to Miss Edythe E. Rely of Grand Rapids, Mich., a graduate of the Conservatoire Royale du Musique of Brussels, Belgium. In 1920 he was appointed Junior Engineer, U. S. Geological Survey, Water Resources Branch, for field duty in Nevada, California and Utah, with headquarters in Salt Lake City, which position he now holds. Bob has two children, Edythe Almeda, and Edwin Robinson Rowe. He writes, "I guess that's all, though we have had lots of experiences that are of interest to ourselves only, such as pulling the girl through smallpox and the boy through pneumonia. My work is principally stream gaging, requiring about a third of my time in the field (mostly in Nevada) for periods of from one to four weeks, and the balance of the time in the office computing. There is some little construction, some reports on water power development (installed and proposed), and lots of practice driving tin lizzies around the 'desert wilds.' I enjoy the work immensely, not alone for the experience, but for the opportunity of becoming intimately acquainted with a region so much in need of development. I like the people immensely, for there are few Mormons in Nevada, and in Salt Lake there are five Gentiles to each Mormon. I have experienced the sensation of being lost in the desert alone and having to sleep in the car overnight with a dry water bag and a dry radiator. I have made a 350-mile stage trip several times in the winter when it meant two or four horses to a small sled and seventeen days from the start to finish, riding all day fourteen days. I started out on this trip last January with the temperature—37° F. And still I like it more and more."

Brother Ned mentions the recent Technology doings in New York. "About the middle of December the Technology Club of New York and the Technology Clubs Associated had a smoker and then the following night a banquet at the Biltmore in honor of President-elect Stratton. On the day of the banquet, all of the classes had separate class luncheons. Among the fellows I saw again and talked with were Pete Harrel, who is now on the engineering staff of the Western Union at headquarters in New York City, Monk Pierce, still of the McCall Publishing Company, Phil Dinkins, Gardner Gould, Hamilton, J. E. Rowe of Course II, Sax Fletcher, Max Untersee, McMoran, Weiskettle and Brandon. Also saw Mr. Duncan McRae, now Dr. McRae, of Freshman Chemistry days. He now lives in East Orange; is married, and I hope to see him again before long. The whole Tech doings were interesting and I ran across so many of the 1918 fellows that I hope to keep in closer touch with the N. Y. M. I. T. Club. The New York 1918 men intend to have a luncheon once a month."

Course IV

R. B. WILLS, *Secretary*
653 Franklin St., Melrose Highlands, Mass.

The Alumni Banquet brought forth into the light at least one architect who has been in semi-seclusion, that one being Grenny Hancock. Grenny

1918 Continued

is and has been for some time broking with J. Sherman Adams, of 70 State Street, Boston.

Herb Hatch came forth with the information that he is now with Stone & Webster at 147 Milk Street, Boston.

John Albert Williams is apparently prospering as New England Sales Manager of the H. E. Fletcher Granite Co., and is hanging out and over at 132 Bowdoin Street, Boston.

Marvin Stetler contributed a letter for the last issue of the Review, but it was held out for lack of space and is given below.

"Your call for dope for the Review has reached me several times, but always I was so darn busy that I let it slide. The news in the Review is always interesting and especially so, that of the former classmates. I'll try to give you a little information as to my activities since 1917.

"I took the Army exams in July, 1917, and in November was sent to the Army Service Schools at Fort Leavenworth, Kansas, for thirteen weeks in the Cavalry School, after which time I was assigned to the 16th Cavalry at Brownsville, Texas. After several months, was transferred to the 1st Cavalry at Douglas, Arizona, which was ready for overseas service. We kept all our equipment packed for two or three months and were still ready to move when we got orders that probably no more cavalry would be sent over. I stayed out there until June, 1919, when I resigned from the service. Came to Fort Worth, Texas, and went to work for Baker and Von Zuben, Engineers, as levelman. Later, took charge of party as transitman and at the end of nine months left them as office engineer. Came to Dallas with the Mosher Steel and Machinery Co. as structural draftsman and assistant designer to Chief Engineer. After about nine months, I was taken off all drafting work and devoted all my time to design. Since that time, I have done nothing but take on additional duties and as a result I am simply snowed under all the time. I was transferred to the Sales Department as engineer in charge of design and at the present time handle all design work. Am in charge of sales outside the City of Dallas and am Advertising Manager, so with all that work of a million-dollar company which, by the way, also operates a large structural plant in Houston, Texas, you can see why I have been putting in three nights a week for about the last eight months. Have a little office of my own and manage to smoke a big nickel cigar now and then."

Also some interesting news from Frank M. Lobos, all the way from Casilla 2568, Santiago, Chile.

"Doubtless, you will be surprised to hear from me, but you see, I don't forget my old Tech classmates. I have been here since September of 1920. I came here connected as Concrete Engineer for the Braden Copper Co. of New York. Was for a year and a half working up the mines and since October of 1921 I am located in Santiago, my home city, as Concrete Engineer for the Campaña Chilena de Electricidad, Ltd. We are about a dozen Tech men down here in Santiago, all working in a way that makes you think that in the near future Tech shall have quite a few fellows more in the duPont's class!"

* * *

The class will be sincerely sorry to learn of the recent bereavement of Mr. and Mrs. R. B. Wills, who lost their infant son, Royal Barry, Jr., on January 20.

Course V

GRETCHEN A. PALMER, Secretary
Box 374, Morristown, N. J.

I received your card a few days ago and hurry to get in my few words. I can not give you one item of news from the fellows, as they have neglected to send me a single word.

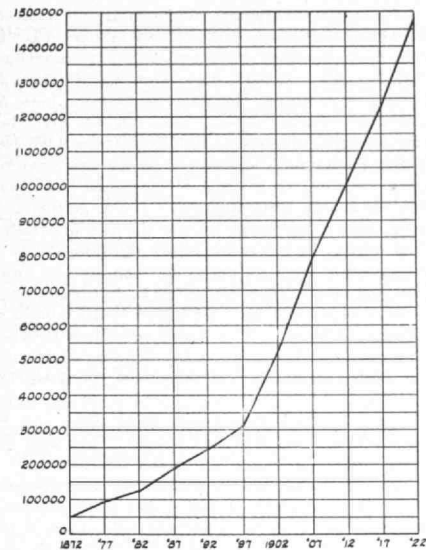
I do not know if you are to blame for the little dig at me in the last Review, but let me say this, that all the Clergy of New Jersey that I have met so far are very nice. If you are referring to what happened in this state in September, let me say that I am not in that diocese but in the Diocese of Newark, which comprises the northern part of New Jersey and is not connected with the Diocese of New Jersey.

Apparently, I should feel hurt at the dig, as I have had a number of people ask me if I was not upset about it. Indeed, I am not. What kind of a sport would a "fella" be to get sore at that?

* * *

The class has responded nobly to the cards recently sent out concerning the Five-Year Reunion in June, and at this writing we have fifty members who have definitely declared that they will attend. In addition to these fifty, there are about twenty more who will come if they can possibly be in Boston in June. With this definite information to proceed upon, the Committee has arranged with the hotel manager for the use of his hotel from Friday afternoon to Sunday, after lunch, thus making two full days. The rate will be \$7.00 per day, as stated before, if there are fifty men there; \$6.50 per day if we have seventy-five, and \$6.00 per day per person in case we reach the astounding total of one hundred. There are about eighty members of the class who have found it impossible to attend by reason of their distant location from Boston. This leaves about two hundred and fifty men of the class from whom we have not heard.

Dick Wilkins declares that he will be on hand "if sober." Eddy Rogal says, in answer to the question, "Just try and keep me away." Tom Kelly and several others inquire if wives are to be included in the festivities, to which we have replied that if you want a wife, it will be necessary to bring your own. Maggie Magoun intends to bring not only his wife, but his entire family.



Showing the growth of the Brown & Sharpe Mfg. Co. from 1872 to 1923 in square feet of floor space.

This Chart tells a story

This chart of the growth in floor space of the Brown & Sharpe Mfg. Co. from 1872 to 1923 shows the steady, persistent development of a business founded on the sound basis of quality of product and service to customers.

The growth recorded by this chart can also be attributed to the rapid advance of mechanical progress—a progress due in no small measure to the many important inventions and developments associated with the name Brown & Sharpe.

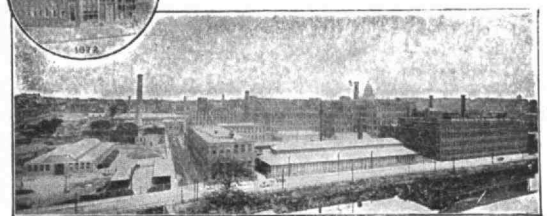
The invention of the Vernier Caliper, the introduction of the Micrometer Caliper, the invention of the Universal Milling Machine, the Universal Grinding Machine and the Formed Cutter, the introduction of the Constant Speed Drive and the Ground-Form Gear Cutter are landmarks in mechanical history—all of Brown & Sharpe origin.

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Milling Machines	Screw Machines
Grinding Machines	Cutters & Hobs
Gear Cutting Machines	Machinists' Tools



1920

KENNETH F. AKERS, *Secretary*, 54 Dwight St., Brookline, Mass.

The first thing on the programme which we are all interested in is the Alumni Dinner, which took place in Walker on January 13. The following 1920 men turned up and helped Norrie Abbott, our cheer leader, through a lust cheer for our new President, Dr. Stratton: Franklin Badger, Bob Mitchell, Bob Tirrell, A. A. Frazer, Hank Couch, Malcolm Lees, A. W. Rouse, E. F. Hill, Buck Clark, Jimmie Gibson, Perc Bugbee, Ned Murdough, Bill Freeman, Norrie Abbott, Jack Nolen, and Ken Akers. We were all sorry more of 1920 didn't show up.

Jimmy Gibson kept his end of the table engrossed in stories, the details of which Jimmy, alone, had better tell you. Jim is getting to be a "real" real estate broker, if we can judge by the manner in which he collared prospective home owners in the lobby before the dinner!

Perc Bugbee still is at work giving us the latest dope on Fire Prevention. —Ned Murdough continues to show Metcalf & Eddy the real way to engineer their projects.—Ev Freeman's father hasn't fired Norrie Abbott yet from the payroll of the Factory Mutuals. You should get Norrie to tell you how he attempted to "listen in" on his radio on Dr. Stratton's address at the New York Technology Club a month ago. He heard everything but Dr. Stratton's address!

I have been given to understand that Snug Etter and Hugh Shirey celebrated New Year's in grand style in Chicago. They went to a spotlight dance the first part of the evening, very much "spirited up." During the dance, the man running the spotlight forgot himself and allowed said "spot" to go out. Snug had so much "hair tonic" that when the hall went dark, poor Snug thought he had gone blind and sat right down in the middle of the floor, where everyone found him when the lights went on, previously having heard him declaring in a loud voice that he was blind! Is this right Snug?!

I told you last month that Ken Clark was recently married. His wife was formerly Miss Fannie Elizabeth Searer, of Ashland, Mass.—Bill Dewey is still clinging to the paper industry as Assistant Superintendent at the B. D. Rising Paper Company in Nausetonic, Mass., and living in Great Barrington. Bill tells us also of his engagement to Miss Mary Louise Walker of Evanston, Ill. Congratulations, Bill, and may the future bring you all that is bright.

Leland Gilliat was married in January to Miss Verne Elizabeth Holder, of Lynn, Mass. 1920 wishes him all the happiness possible, I am sure.—Andre Dechamps of Belgium, one of our 1920 men, is to be married in February to Mml. Germaine DeMerbe of Mons, Belgium. You see they're all doing it!

Harry Kahn writes as follows from 57 West 46th Street, New York City: "Have not had the good fortune of meeting many '20 men lately. Sam Ruttenberg, X, '20, demonstrated his Amperite at the Radio show during the Christmas week in New York. He had on exhibition a variocoupler and variometer made by Joe Kaufman, VI, '19, advertised as the best instrument of its kind in the world.

"Met one of Leo D. Kahn's fraternity brothers outside of the Astor on Christmas night. He tells me that little Leo was broadcasting his piano jazz around Boston. Tell L. D. to tune in on 1920 and send 'em a wave or two. Saw Jeff Mead, X, '20, at the Tech smoker December 15. Mr. Mead was armed with a snap of his first. Some girl, I'll tell the Review! Also some Jeff! Same boy, same cigar, same smile, and a wee bit more capitalistic looking around the waist.

"Just a few words about that smoker and class luncheon. Jeff was the only '20 man I recognized at the smoker. There must have been many more whom I did not know. Sad to relate, in the space allotted for the address of the place where 1920 was to have its class luncheon the next day, no address appeared. By 'phone I learned from the Club that we were to mingle with the Class of '18 at the Hotel Bristol.

"All dressed up in my new brogues, and red and blue muffler, I breezed into the Bristol. Of the men seated around the table about eighteen were of the Class of '18, one of the Class of '19, and yours truly the only one of '20. I really was honored to be with '18 men who thought I was one of them (I've developed the wrinkles acquired at Tech) but I'd have swapped honors for the sight of a few '20 faces. How come the absence of '20 men?

"I did not attend the banquet for no good reason at all.

"If you can give me the names of some '20 men around New York, I might be able to pick out those I know and see that they become regular contris to 1920's news.

"Can't close without wishing you a Merry Christmas and a Happy New Year with lots of easily obtained scandal for your column."

I ran into Ralph Abercrombie last week on the train to Greenfield. He is with the Baush Machine Tool Company of Springfield, Mass. Travelling is his chief occupation. Aber is the same good-natured man that we all knew him to be in Tech. News is still very scarce! The same old plea is hereby given—"Write to Ken Akers!"

I'll try to get a financial statement of 1920's funds out to you by next month. I feel I owe you one after two years of silence, so that you may not think that I am embezzling "our money." Yours for 1920.

1921

R. A. ST. LAURENT, *Secretary*, 754 Morton St., Mattapan, Mass.

CAROLE A. CLARKE, *Assistant Secretary*, 528 Riverside Drive, New York, N. Y.

As I sit here chewing my gum, legs crossed—beg your pardon, limbs crossed, and scratching my upper lip, the big question is where to begin. You

saw the feature story of Cac's in the last Review; well, that with other things preoccupied Cac's mind so that to date a story of the New York 1921 Class Dinner at Pig and Whistle Inn is still in the ether. If we could open with a fluent flow of words about that affair or how the gang of '21 men conducted themselves at the dinner to Dr. Stratton, we would be well on the skids. Both events proved to be successful in more ways than one. Not any were plastered, but all were feeling fine—Randy Haigh included.

Although the 1921 men in Boston are not thousands yet, the turnout at the Annual Alumni Dinner on January 13th was good. All dressed up with pointed paper caps, our upper extremities distinguished us from the common herd. We had some class cheers and they were good—yup, we had them written on cards and everybody read them fine—but as cheers they were—. We're going to use these cheers again, so read them—try them—copy them down. Cheer One—Yea '21! Yow '21! Yea Yow '21! (To be given three times.) Cheer Two—Who in Hell! What the Hell! Who the Hell are we! '21 Hooray! '21 Hooray '21! (To be given once.)

We want suggestions for more cheers so as to have three or four good ones. Then let's inform every '21 man of these cheers so that when and where '21 gather they will have a distinctive bark!

Present at the dinner were: Ralph W. Wood, XV, 121 Albert Avenue, Edgewood, R. I. Chet works for the U. S. Finishing Co., Pawtucket, R. I. He is learning the game and likes it fine. From a reliable source, we hear the Technology Club of Providence is one live crowd and any of our gang in that neck of the woods should drop in on them when in session. Nobs Abbott, Jr., '20, 107 Providence Street, Providence, is Secretary, and Kale, Keeper and maybe keeper of other stuff.

Henry R. Kurth, VI, 27 Astor Street, Suite 17, Boston, is with the Edison Electric Illuminating Company of Boston. Chick is laboratory high voltage engineer, having some time ago left the General Electric Company. To the question of marriage, already announced in a previous issue, Chick admits yes in July, 1922, to "a woman's fool" because "no men suitable." There are three men whose addresses are desired by the above party. They are W. L. Knoepke, VI, who in the January Review was given as having disappeared from 122 N. Fulton Avenue, Mt. Vernon, N. Y. As yet, Bill hasn't answered the letter sent him early in January. What do you say, Bill? The other two men inquired about are Charles A. Williams, VI, Engineers Club, Philadelphia, Pa., and Larcom Randall, VI, living at 17 Green Street, Brookline, Mass. Charles labors with the Design Division, Transmission and Distribution Department of the Philadelphia Electric Company in Philly, having been there since leaving the portals at Cambridge. Charles says he's married "not yet." He and Randall, who is junior engineer for the City of Boston in connection with the City of Boston vs. Edison Electric Illuminat-

Public Sales

We have purchased 122,000 pair U. S. Army Munson last shoes, sizes 5½ to 12 which was the entire surplus stock of one of the largest U. S. Government shoe contractors.

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BETTER LIGHTING NEEDED IN INDUSTRIAL PLANTS.

In a paper read before the Illuminating Engineering Society, February, 1920, entitled, "A Survey of Industrial Lighting in Fifteen States," R. O. Eastman submitted some very interesting data regarding the lighting conditions in industrial institutions. The survey comprises some 446 institutions, in which lighting was considered by 55.4% as being vitally important, and by 31.6% as being moderately important, and by 13% as being of little importance. Practically 58% considered that lighting was as important as power in the operation of the plant, and a small proportion would give more attention to lighting than to anything else.

In considering the present condition of lighting as found in the various plants, only 9% ranked as excellent, about $\frac{1}{3}$ ranked as good, 29% fair, 18.8% poor, 3.5% very poor, and 7.8% partly good and partly poor. It was found that the lighting in the offices was far superior to that in the shops; 19% being excellent, 36% good, 31% fair, and only 13% poor and none very poor.

On consulting the executives regarding what factors were most important in considering lighting, the following facts were revealed: Increase of production 79.4%, decrease of spoilage 71.1%, prevention of accidents 59.5%, improvement of good discipline 51.2%, and improvement of hygienic conditions 41.4%. Manufacturers who have good lighting appreciated its value largely from the standpoint of its stimulating effect upon output.

There is no question that any intelligent man who carefully considers the necessity for good lighting in an industrial plant, will agree that it is impossible for a person to do as good work, either in quality or quantity, in poor light as in good light, but yet the result of a careful analysis discloses the fact that only about 40% of industrial plants are furnishing good light to their workers and 60% are operating under poor lighting. It is hard to understand why such a proportion of concerns can be satisfied with a condition which is universally admitted to be a curtailer of efficiency and a prolific causer of accidents. The principal cause of this condition is that those in charge of such establishments have not given the attention to lighting that it demands. They do not know what constitutes good lighting, and in their absorbing interest of other factors of production have overlooked a vital one.

Every safety official should deeply interest himself in the lighting of his plant and insist upon good lighting as much as good goggles, good guards and other necessary accident prevention equipment. Every production manager should insist upon good lighting because the efficiency of the working force is increased by the condition of the lighting furnished. The plant physician should examine the lighting, for eye strain and eye fatigue are directly affected by poor lighting, as is the hygienic condition. Well lighted plants are invariably cleaner than poor lighted places. Plants equipped with Factrolite Glass in all windows are well lighted.

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1921 Continued

ing Company of Boston, got together over last Christmas and checked up on each other's behavior for the previous six months. Randall further says he's not married, but has two children named Christopher and Dumbella, (I like the names — so poetic). "During December I spent ten days in Cleveland finding out why they sell electricity so much cheaper than the Boston Edison does" he says. Write again and tell us what you found. You ask where Walter A. Jayme, IV, is. I'd like to know myself, because nothing has been received about him since November, 1921. The only address which is alive is 3715 Brighton Road N. S., Pittsburgh, Pa. When you write, bawl him out good and proper and tell him to send his exam this way.

The next of the gang on the list who was at the Alumni Dinner is Maurice Basinow, X, 154 Humboldt Avenue, Roxbury. He is with the Gordee Products Company of Boston. Say, Maurry, send in your exam so I can tell the gang more about you. Do It Now! Bumping around with him that night was Sampson Brown, X, 643 Pleasant Street, Canton, Mass. Sam likes the woods fine out in Canton with the Springdale Finishing Co. When you send that exam in today, tell us about your work.

The gods rolled smooth dice easy and Trevor O. M. Davidson, II, 65 Hodge Avenue, Buffalo, N. Y., popped in on the dinner. Chub is a special apprentice of the Bucyrus Company, South Milwaukee, Wis., travelling the U. S. A. and only five months to go before becoming attached to the Engineering Department. As to where to hold our Fifth-Year Reunion, Chub says, "From reports of our sales representative — Montreal, Canada, would be a suitable and sociable city."

In our happy group was R. B. Parkhurst, X-A, 99 Lighton Street, Lynn, Mass. With a cap on Reg's noble brow it topped a large evening, but it might have been much larger. With the General Electric Company in Lynn (in their laboratory), Reg applies the ka's to a T. But then Lynn is not far from the three-mile limit.

Also at the dinner was Richard C. Poole, II, 110 Larchwood Drive, Cambridge, who tells us he is a student engineer with the Worthington Pump & Machinery Corporation, East Cambridge. To the question on the exam if there were any classmates whose addresses he desired, the reply was, "No — No one owes me any money, aren't I lucky?" Yes you are, but don't you wish somebody owed you a thousand sheets of yellow paper.

Still another of the gang was Winfred C. Wilde, IV, 105 Middlesex Street, North Andover, Mass. Win puts in his regular licks with the Brightwood Mfg. Co., of North Andover. He is another of the crowd who is going to send that exam to Saint today. Do It Now!

Another fellow who was right there at the banquet and who hasn't sent in that exam is Francis T. Hill, X, 45 Sherman Street, Canton, Mass. As yet, no more detailed information about Francis can be given than that he is with the Maryland Casualty Company in Boston.

Say, gang, do you remember Willis C. Luce, I, 23 Inman Street, Cam-

bridge? Well, Luce was there and helped to make the party go. His daily activities are given to the Massachusetts Department of Public Works.

Willis L. MacComb, III, 56 Oliver Street, Watertown, was there. Until Mac sends his exam, all we'll say is that he is with the Hunt-Spiller Manufacturing Corporation, 383 Dorchester Avenue, Boston.

Also Carl A. Ellis, I, 191 Waverley Oaks Road, Waltham, who is a draftsman, transitman and chief of party with Rowland H. Barnes & Henry F. Beal, Civil Engineers in Waltham, was there.

The Hon. Charles Albaugh Cassell, the pride of Course III and one of the jewels of the old Smithwick-Dean-Anderson Bay State Road combine, recently reported from Parkersburg, West Virginia, where he is enjoying the gratuity of a kind and benevolent payroll—that of the Monongahela Power & Ry. Co.

He says in part: "Came back from Mexico last August, being called home by my father's death. Did not return, but went up to New York and worked for the Western Electric on the automatic telephones for a couple of months and came out here about the middle of November. Been here ever since, doing everything but mining. This company, I believe, is like the army, as they will give you anything to do. My first job was to put in the foundations for steel towers for a transmission line across the river, and then install a stoker in the power house. Managed to get by, even if I didn't know what I was doing half the time.

"Am on a sixty-mile survey up the Ohio River at present for a high tension line. Expect to be on that for at least six months.

"My boss is drilling an oil well out here and I am one of the stockholders. If the damn thing caves in, I will be in Boston about April. If it doesn't, the end of work is not yet in sight. I think we are going to hit something. If you feel lucky, you had better take a few shares, \$10 per share."

LeRoy M. Hersum, I, 1753 Massachusetts Avenue, Cambridge, joined us with all of his six feet, two and three-quarter inches. Shorty is engaged with the Department of Public Works, Division of Highways, District 6, as an Engineering Assistant. Betcha where there are long stretches to fill, Shorty fills the gap.

John B. Mattson, VI, was there, having sacrificed an evening of study and researching to join the gang. Although Matt still has his exam to send in, we gleaned that he is with the Hood Rubber Company, solving their difficult problems and developing new ones.—Leo C. Pelkus, X, 57 Lithgow Street, Dorchester, came in on the tail-end of the food but yet in time to lend moral support to the cheers. Leo is Sales Manager with Barnstead Still and Sterilizer Co., and claims to have many responsibilities. To the question of marriage his answer is, "Absolutely not."

And incidentally your Secretary, Raymond A. St. Laurent, X, and X-A, 754 Morton Street, Mattapan, was there trying to pep the works. At present, he is with Arthur D. Little, Inc., 30 Charles River Road, Cambridge. Your Sec is trying hard to develop a Direct Mail Advertising program and handling general publicity. Along with this duty the direction of considerable office sales routine occupies my time—but my real big job is Secretary of this here Class of 1921. It is some job—occupying only about three evenings a week and all holidays—keeping the files in shape, so that live addresses and activities will be available. The answering of all letters which you fellows write is well nigh to impossible, but I'll do my best. To all of the gang who have come through so splendidly in reply to our class letter, I thank you and now I will do my utmost to live up to the task before me.

There are still quite a number who must Do It Now and send in that exam, and there are a few others who received our first letter too near Christmas, but who are going to send that check in Now! That's enough of that, now for more news.

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1921 Continued

Fred W. Adams, X, 19 Fairfax Street, West Newton, Mass., announces his engagement to Miss Martha Noel Terry of Stoneham. Congratulations from the gang. Fred is at the 'Stute, assistant in the department of chemical engineering. To the question of marriage, how's this for a unique answer, "Not yet, but soon" and as to the reason why, "Shortage of ministers." I bet I could find a minister if I could find the jack and there are others riding the same canoe. As to where Edward F. English, X-A, is, I don't know, but the address I have is Box 414, Durban, Natal, South Africa. If you write him and get a reply — 'member your Sec wants to hear. Fred also says that George H. Atkinson, X, at Nitrate Tests Plant, c/o Chile Exploration Company, Port Agency, Casilla, 811, Antofagasta, Chile, is working in the nitrate industry in Chile on a new experimental process. McCue, '22, and Littlefield, X-A, '21, and about eight more M. I. T. men are there also. Several weeks ago a letter came to me from George, saying, "We are a group of about a dozen — mostly Tech men of our class or another here at Guggenheim Bros. Nitrate Tests Plant. Cecilia is situated in Pampa Central, some sixty miles back from the port of Antofagasta, Chile. The surrounding country is no Garden of Eden, but there is plenty of interesting work to make up for other deficiencies." You of the gang who knew George — write!

Lincoln B. Barker, II, 320 South Avenue, Wilkesburg, Pa., or Canisteo, N. Y. (use 'em both if you want), after his training as a graduate student with Westinghouse at East Pittsburgh is now with the Industrial Heating Section wising up on everything that's late and niftig in glue pots, solder pots and space heaters. He says to see their ad in *Electrical Merchandising* for February. Say, you gang of Tech alumni in and around Pittsburgh. Bob wants to know where you live. Some real life in Pittsburgh among Tech men is what he wants, so here goes. Francis Foote, '16, is Secretary of the Pittsburgh Association, M. I. T., and can be reached at 1200 Jones Bldg., Pittsburgh. Say, Bob, why don't you and Thornton see Foote, '16, and see what he knows about the men in that neck of the woods and then write me for what dope you want. In the meantime, you men in and around Pittsburgh, write or call Bob.

Emmett J. Scott, Jr., I, 239 Glorida Avenue, N. W., Washington, D. C., is wanted on the 'phone by the above Bob Barker, also write Saint.

Lawrence Castonquay, II, 22 Franklin Street, Thompsonville, Conn., spent some time after graduation, "Scouting around looking for financial aid to back a pet idea of mine — result — plenty of good advice," and is now Assistant Plant Engineer of The Bigelow Hartford Carpet Co. of Thompsonville, Conn., doing Factory Construction Textile Machinery Layout, and General Mill Engineering. Casty says he's not married and wants to know "who wants to marry an engineer" and "Haven't seen a '21-er in this town. If any of the old gang are around, I would like to have them look me up" and "Where is the old 'Entropy' gang?"

James R. Cudworth, XII, Mina Tiro General, Charcas, S. L. P., Mexico, writes from far away, where he is with the American Smelting & Refining Co., Charcas, San Luis Potosi, Mexico, as Assistant Engineer surveying sampling and drill testing. Jim is not married but is "engaged to a Wellesley girl" — and says "give me time — poco tiempo." An extract from his letter gives us a little encouragement. "The Class letter contains the personal touch which is all to the mustard. No one really appreciates what Technology means until he is out in some hole where he has plenty of time to look back. Then instead of his class interest waning, it thrives. All by myself, I drink a toast to '21 (Drinking is still legal down here). May she live long and prosper.

"I can't resist your appealing letter for news. I am the only Tech man here at the Charcas Unit of American Smelting & Refining Co. I am doing engineering work, just at present spending most of my time up a raise on the 5th level comparing drills. I used to think we had to eat dirt at school, but down here it is a steady diet.

"Nevertheless, Mexico has its advantages. It will never go dry or at least I shan't be able to produce that state. Then again, turkey is cheaper here than in the States and I sure do love turkey. I've met my defeat as regards fleas, they grow here about the size of Jersey mosquitoes and are as deadly'.

"Once in awhile, I hear from R. W. Smith in Tennessee, but he is so busy gadding around with those Southern girls, I don't hear very often.

"I would like to get the addresses of '21 men in Mexico. It wouldn't be a bad stunt to have our reunion down here." What do you say, you fellows down in Mexico — write to Jim, also to me.

Vladimir Dixon, II, 1025 Central Avenue, Plainfield, N. J., after spending a year at Harvard and considering it the most profitable one of his existence, is now training for European endeavors for the Singer Manufacturing Company of Elizabethport, N. J. Dick is not married, having so far been self-sufficient and of course has no descendants. To quote from Dick's letter, "The New Technology Review is a vile thing, compared to Prof. Roger's Review; it smacks of yellow journalism; it is in line with the *Klasy Kollege Klothes* and *The Tech Engineering News* most horrible! I am returning the examination paper and sending two checks; one for the Alumni Association and one for the class dues. Will you please see that justice is done to all in this matter.

"The world is treating me fine; I have an excellent job with bright prospects for the future. But my highly sensitive soul is disturbed by the cran materialism of the visible universe. If you know of any philosophy (Coué and such like excluded) that will refill the cup of my joyousness, it is your sacred duty to let me know at once the dogmas and credos of such teaching.

"I wish you a very happy New Year and remain your most humble and devoted servant."

Roderick K. Eskew, X and X-A, c/o Hercules Powder Co., Parlin, N. J.,

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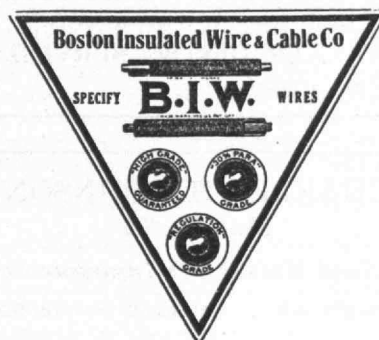
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1921 Continued

after serving as an analyst for the above crowd is now researching on nitro-cellulose. Rod says he's not quite married and to quote his letter, "Your communication of January fifth received. In accordance with its suggestion I enclose money order to cover Alumni Association dues, subscription to Technology Review and class dues from 1921-1923.

"Sure, your note in the January issue was O.K., but a bit musty, as I wrote it last September. On October fourth I took a position at the Experimental Station of the Hercules Powder Company, Kenvil, N. J. After a few weeks there, I was transferred to their nitrocellulose plant at Parlin, N. J. That's where I am now, doing research on low viscosity lacquers with an occasional chem engineering problem around the plant to make me thankful I took X-A.

"Yes, I'm living in New Brunswick, but I don't advertise the fact. We have to commute ten miles to Parlin every morning, but that's not so bad, as the company flivver comes by the front door.

"Sorry, I haven't located any '21-ers in this vicinity yet. Stopped by to see Bob Whitehouse at the New York offices of the Western Union and found him sitting in a swivel chair. Yours for '21."

Joseph W. Gartland, X and X-A, 229 3rd Street, Niagara Falls, N. Y., sent us about the newsiest letter received yet. If you don't believe it — read it for yourself. Joe says on this marriage question, he's not married "while I'm sober" modified by "haven't been in that condition since June 10, 1922." Now go ahead and read a real letter: "Having had the urge for several weeks past and with a couple of well deserved balling-outs under my skin, here goes.

"After receiving the old sheepskin I made the best of my few last moments in Boston as you may well guess. Doc Haslam forwarded me out to the National Carbon Company here in the Falls and I assumed my humble labors on July the 5th. My first assignment was a bit of plant research work on pyrometry, which thanks to Doc's Combustion course I gobbled up in short order. The rest of the summer I spent in familiarizing myself with plant details and routine lab tests. Along about September, my boss and

erstwhile Chief Chemist and head of our Inspection Department, was taken sick and I had my chance at running the lab. Somehow or other they forgot to kick me out when he returned and since then I have been officiating there. My chemicking doesn't amount to much, though, and most of my time I spend in the plant looking for troubles which might affect the quality of the output.

"My roomie here is also an X-B man, Joe Forrester by name. He is a '22 man of the Bangor group and a Dorchester boy.

"Sorry I didn't get to see you while in Boston for Christmas, but I'm afraid I have some irate relations on the same score. Had a little session at the house the Saturday before Christmas, which I wish you could have joined. Carl Leander, X, and L. C. Pelkus, X, were among the dignitaries present. No doubt Carl has told you how well he likes his new position with the Dorr Company at Westport, Conn.

"I have been religious in my attendance of the local Tech club functions. There are quite a few followers here and in Buffalo. Carl Hasslacher, '21, is with the Niagara Electro Chemical Co. I don't know his exact address, but Buffalo Avenue, cor. of Third Street will get him.

"We see the boys at 338 Summer Street occasionally. Leight Evans, X, has been up once or twice. Heinie Wagner, '22, ex '21, and Corrie Sipple, '22, have drifted in, too.

"Had a card from Rich the other day as well as a Freuliche Weinachten from Oscar Neitzke, X. His address is c/o Countess von Kalekreuth, Saurez, Str. 18, Berlin — Charlottenburg, Germany. I also met Eppie Epstein, X, going down in the train. He is with the Viscose Silk Co., in Tonawanda.

"H. G. Griffith, X, known as Griff offered me a job as his assistant this summer down in El Paso. It was a long walk home so that I decided not to try it. He is doing quite well and is now head of their Mexican Research Department.

"Ace Rood, X, seems quite 'enthused' over his job with Rail Welding and Bonding Co., of Cleveland. His address is 1876 Knowles Street. According to all reports they are wild and wooly out there.

"Eddie Haywood, X, is still in the benzol plant at Lackawanna. He can be reached at 589 South Park Avenue, Buffalo, N. Y.

"I am enclosing a money-order for six iron men, St. Five of them are marching for M. I. T., one for E. H. S. As it is too soon after Christmas to draw on the check account, I'll let you be the go-between. L. C. tells me that you are well satisfied with progress at A. D. L. Best of luck and let me hear from you when you get a chance to."

You bet we all like letters with news like this.

W. R. Barker, XIV, 485 Ashland Avenue, Buffalo, N. Y., has tied up with the Robertson-Cataract Electric Company of Buffalo as a Jobber Electrical Supply Salesman. Bob claims the class notes are "mostly bunk" and right below wants to know about Wint Dean, XV, and Wally Adams, I. Wint has not sent in his exam yet, so the only address available is 415 Summit

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1921 Continued

Avenue, St. Paul, Minn. The most recent word on Wint since his betrothal is that he's a salesman for his dad's company, working on a commission basis, so that nobody will get any wrong impression. Wally Adams', I, present address is Box 36, Effingham, Ill., where he is with the State Highways Division of Highways, State of Illinois. Yes, Wally, I am acquainted with Miss Anne Jenkins of Rocky Mount, N. C. Congratulations to you both on your engagement.

The last address I have on Grant L. Miner, Jr., I, is 712 North Central Avenue, Richland Center, Wis. Hokey hasn't written, so that if you hear, let me know.

The late train from New York brought in this very condensed cold summary of what happened in New York in December, but, both you and I know that Cac is one busy boy, so we'll forgive.

Men present at 1921 Class Dinner, Pig and Whistle Inn, New York City, December 15, 1922: C. A. Norton, Radio Corporation of America, 233 Broadway, New York City.—R. H. Gilbert, New York Telephone Co., 104 Broad Street, New York City.—D. G. Morse, South Orange, N. J.—E. R. Haigh, 318 West 57th Street, New York City.—Charles Longfellow, Jr., American Telephone and Telegraph Co., 195 Broadway, New York City.—W. S. Ross, 266 High Street, Newark, N. J.—L. P. Botting, R. D. Kohn, 56 West 45th Street, New York City.—J. D. Bowman, 347 West End Avenue, New York City.—N. F. Patton, 255 West 92nd Street, New York City.—A. W. Norton, 320 Fifth Avenue, New York City.—R. E. Goddard, Bodal Bldg., Maplewood, N. J.—A. S. Denbin, 10119, 118th Street, Richmond Hill, L. I., N. Y.—J. G. Hauber, 390 Waburton Avenue, Hastings-on-Hudson, New York City.—Sumner Hayward, New York Telephone Co., 104 Broad Street, New York City.—C. C. Carven, 385 Fifth Avenue, New York City.—R. E. Waterman, 206 Mt. Vernon Avenue, Orange, N. J.—C. A. Clarke, 528 Riverside Drive, New York City (Chairman).

Men present at Stratton Dinner, Hotel Biltmore, December 16, from Class of '21: H. A. Kaufman, 15 West 90th Street, New York City.—J. D. Bowman, 347 West End Avenue, New York City.—W. L. Knoepke, 649 Broadway, New York City.—Joseph Wenick, 496 East 162nd Street, New York City.—F. T. Whitworth, 147 West Jersey Street, Elizabeth, N. J.—A. B. Munning, Matawan, N. J.—J. C. Morrell, Bridgeport Brass Co., Bridgeport, Conn.—R. R. Whitehouse, Western Union Telegraph Co., 195 Broadway, New York City.—W. W. Anderson, 17 Gramercy Park, New York City.—C. A. Norton, 195 Broadway, New York City.—S. J. Hill, 37 Mapes Avenue, Newark, N. J.—F. R. Kingman, 271 Central Park West, New York City.—C. A. Clarke, 528 Riverside Drive, New York City.

More to come later about these dinners, what happened and what the men who were present are doing.

This is just a beginning on the notes which you should get this issue, but this is all the space The Review will let me have, so be patient my dear souls of 1921, and your patience will be rewarded with much more—maybe better in the next issue.

A final word to you who haven't yet—both exams and checks—Do It Now!

1922

ERIC F. HODGINS, *General Secretary*, Room 3-207 M. I. T.

Once again, circumstance forces us to strip our notes of any ornamentation which, had we but time, we might so lovingly have wrought upon them. We must, this month, be good, Sweet Maid, and let George Holderness be clever.

Passing rapidly on, we come to our record of the Alumni Dinner, held in Walker Memorial on January 13. Nineteen twenty-two did not break all previous attendance records, but at least it was represented by a Quality Group. The four hundred who attended the Senior Dinner in June dwindled to nineteen. Here is the roll: Frank Houghton, R. T. Armstrong, D. B. Marsh, Donald Warner, Harold P. Stanley, Russell F. Greenough, Randall Hogan, John T. Nichols, R. H. Brown, Walter Craft, Jr., H. Y. Tsui, H. M. Bon, Eddie Ash, Tommy Craig, Larry Davis, Fearing Pratt, Lloyd Raymond and Ernest Akerley. A brave little band. It hardly seems as though death could have

thinned the ranks of the class to such an extent that these are all of us that are left. If not, where were the rest? Where, particularly, was Course X, upon whom there now stands the ineradicable disgrace of complete unrepresentation? Come, boys, and rally to battle against lumbago, gout, rheumatism, apoplexy or whatever senile disease keeps you bedridden in these declining years of yours. Select a good stout cane to guide you, and try to totter out to the next Alumni function in slightly greater numbers.

Course I

J. F. HENNESSY, *Secretary*
16 Henry St., Brookline, Mass.

H. Y. Tsui is in the drafting room of the New England Structural Co. He expects to be transferred to the designing department soon, and plans to return to China after a few years. (Tsui wishes you to note his address as Box 163, M. I. T., Cambridge, Mass.)

Sam Cohen is a junior engineer in the Tunnel Division of the Board of Estimate and Apportionment, City of New York. He sent me a clipping concerning the milk-bottle banquet of the Roadbuilders' Association at the Somerset. However, I deny the insinuation. I admit I took the Highway Option at Tech. Aside from that I am entirely innocent, although seriously considering applying for membership in the aforementioned association.

Bill Barrett is still in Chicago, though reported as having been in Boston for the Christmas Holidays, as also were Chick Moore and Sammet. Alex. Dedouloff continues with the Chicago Great Western Railroad. He reports no excitement but a little diversion. During the strike he had to haul 250-pound cakes of ice to the meat trains at three o'clock in the morning.

Course IV

GEORGE S. HOLDERNES, *Secretary*
336 West 72nd St., New York, N. Y.

Recently, while browsing through our mental archives for the substance of a class letter, it occurred to us, brilliantly, if we do say so ourself, that, to be most interesting, every such communique should be different from those that have preceded it. That is to say, that with the same fundamental materials at hand, we should be able to write one thing this time and another thing the next, just as with brick and mortar we build now a sewer and now a schoolhouse. Nor is this an attempt to compare our efforts with either of the above structures.

Truly, then, this letter is different, and in more ways than one. In fact, in two, the most notable being that this time there is no possible alibi by which the better to prepare the readers for the innocuous desuetude into which they are about to be plunged. And besides this, we are offering for your approval, for the first time on any American stage, the latest uncensored reports from many of the old stair-climbers who failed to touch the pen in time for issues past. All right, Professor, a little "wrong-husband" music!

First on your right is Arthur J. Frappier, virtuoso, and already architect in his own name. Frap is hitting it off great guns with his former employer in Providence, and, as Martin and Frappier, they are in the middle of a program of work that will make us all envious. Good boy, Frap! Your faith being in Providence, your future is well founded.

Next comes Ernest Francis Gallagher, noble scion of Erin, who once could make the best cornet imitation to which we have had the privilege of giving audience, and who now is doing stunts with I-beams and kindred appliances for Lockwood, Green and Co. of Boston. Says he has played every part in his firm's repertoire, and even took a flyer up to North Adams to find out why the Hoosac Cotton Co. was off its feed. A very busy gentleman, say we, and a very good report! So, thank you, Mr. Gallagher. You're welcome, Mr. Sheehan.

Then there is Hank Slick Schley, late of the Technology golf team, and later to bed during charrettes. It didn't take long, after graduation at Christmas, for the slippery one to shake off the Boston dust and to head South again. Slick is working for Buckler and Fenhagen, Baltimore Architects, and says he is taking to his work and his bosses like a sick kitten to a warm brick. He goes frequently to Washington for obvious social reasons, as well as to see his

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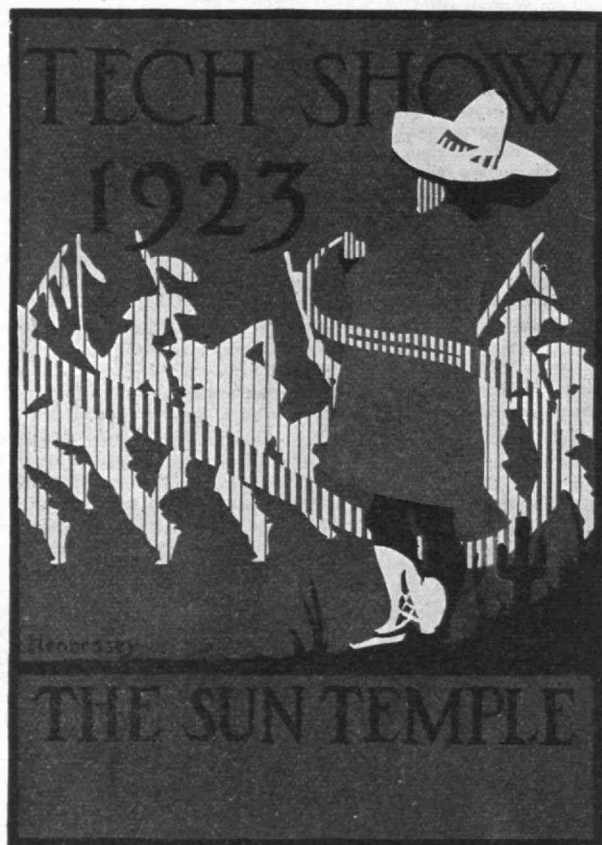
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1922 Continued

brother, who lives there, but his Baltimore address is No. 202 East Chase Street, where he would like to receive manufacturers' samples and letters from his old classmates.

We are advised by Norman Randlett that he gets his pay these days from the Berlin Construction Co., for designing steel in Berlin, Conn.; but Randy says he has to sleep two miles away in New Britain, which is the nearest town in which there is room for him to stretch out. We are just wondering if Randy passes through Ruhr-al valleys in going to Berlin. A corker now, but old stuff by the time this is published.

We regret to say that our old friend, Muhlenberg, has been having a hard time with his appendix since going back to Pennsy. The Mule had the disturbing organ removed during the summer, and, for awhile, plied profitably the antique business, besides doing a bit of surveying in order to catch the open air. If we are informed correctly, the whole thing had to be done over, which was accomplished successfully, and the Mule will soon be on his feet again. As we write this, he is in a Reading hospital, but we hope that ere it reaches the subscribers he will be in the thick of the outdoor work that his doctors prescribe, and will be able to jump a six-rail fence without effort. Speaking of which state, we are reminded that David R. Shotwell, that eminent extortioner of Rogers days, still is gyrating the El Dorado for Stewardson and Page in the city of brotherly love and the Tsetse fly, and is going to win first medal in the forthcoming B. A. I. D. judgment. Dave is doing a restaurant at the end of a steamship pier, and is making the pier three miles long so that the restaurant will be beyond—but that is another story. Maybe the jury are off that stuff, anyhow. Dave writes that any Course IV man (or woman, we take it) can secure a free meal by calling on him at No. 315 South 15th Street. Such epoch-marking prodigality is without parallel in the annals of all architecture, and surely, ere the seasons suffer change, many hungry architects will wear a pathway to Sir David's door, and he will bid them enter and eat, drink and make right merry for art's sake. Personally, we are already consulting time-tables, and intend to see for ourself in what organization Dave is acting as Treasurer this time.

And now we are going to offer a book of free tickets to the South Station concourse to any little boy, or girl, who can guess what Mark Ellsworth is planning to do. Just between us, girls, Mark is going to be married to Miss Helen Armitage Batty, the ball and chain placing ceremony to take place on May first at the home of the bride in Natchitoches, La., after which he says they will wend their way by devious routes, hither and thither, back to Libertyville, to be at home. Mark gets the *croix-de-guerre* with palmolive, first for being able to marry, and second for knowing from what part of the country to pick 'em. For, as the gentle readers may or may not know, Louisiana is just South of that Wonder state, that noblest jewel in the coronet of commonwealths! Change the name of Arkansas? Never! Seriously, though, here go the best wishes of the '22 architects for Helen and Mark, and may their married life be one continuous round of domestic felicity!

Before we leave the subject of Dixie and its brave people, let's take a slant at the Palmetto state and see how li'l Arthur Jones is taking advantage of his professional opportunities. It seems that Arthur is doing chores in the office of Rex Fuller, Charleston architect, and he writes that in the absence of the old drafting room bon mots, he and his employer constantly match wits as raconteurs, telling many stories that Dimmock would appreciate. This leaves us still a bit in the umbra concerning their nature, but they are his own words, and are quoted for what they're worth. Art says he is doing so much cake eating and rug rubbing that he is contemplating entering a monastery to grab off a few hours of sleep.

In a previous letter we set forth the fact that Rosengard was working for the Pitman and Brown Co. of Roxbury. Now we get the additional information that Rosey is developing his artistic nature as well as his rivet and nut complex, and has designed a cover for his firm's catalogue, which will have a circulation of many thousands. Also, he has done the covers for two popular songs which are to be released to the public before long. Not so bad for an engineer, eh what?

For those who live in parts distant from Boston, the affairs there, as the word reaches us, might be summarized by saying that everybody is working night and day, as usual, if not more so, and that Florence Stiles, Coupland, Cheves, Pennell and Slick have left the Institute, each with a diploma under his or her respective arm. Florence is working for a Cambridge architect of her own sex, and is getting away big, doing details 'n everything.

But, enough of the provincialities of the outlying districts! Let us look toward Manhattan, that wondrous isle, where every prospect pleases, and only man is wild. We who have been reported as living in New York are still guilty of it, but we are making the best of matters in this wicked, wicked city. We still have those famous architects' dinners, having had one during the Christmas week, at a dive recommended by Sam Chamberlain on account of the excellent quality of the groceries, and having planned another for this Saturday evening, at the Club. There is a slight extra charge this time, and Chris, the *maitre d'affaires*, slyly insinuates that there will be interior decorations for everybody. And, furthermore, Mr. Emerson will be on hand, so that we expect to have to flourish the S. R. O. sign early in the game.

It was interesting to learn, recently, that Dirk Luykx is going into the Ecole des Beaux-Arts in Paris, and has signed up for the Atelier Gromort, whose Patron is rather well known in Rogers and thereabouts. Dirk is taking his entrances shortly now, chiefly in mathematics, and if he still can remember the difference between a triple integral and a parallelopiped, all will be easy sailing.

So much for so little, or, perhaps better, so little for so much. Something seems to indicate that this letter has developed into overgrown proportions, but there is a reason for this unusual flow of rhetoric butchery. Somebody,—who, when or where we cannot recall,—mentioned to us that he, she or it,—we forget which,—had read our letter in one of the issues of the Review. The

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1922 Continued

effect was miraculous and instantaneous. We were seized suddenly with a desire for pen and paper that we might tear off reams and reams of class notes, for we actually had a reader! But you will acquit us of any trace of self esteem, for encouragement, in its way, is no small thing.

With this we conclude our current efforts for the Review. All of the family in New York are well, and wish to be remembered to all of the folks living elsewhere. And if you haven't seen John Coogan's Hamlet, you simply must go if it ever comes out your way!

Courses V & X

S. PARKER McCONNELL, *Secretary*
187½ Fairview Ave., Jersey City, N. J.

Just by way of introduction and explanation, the above mathematical address is accounted for by the fact that I have a job as an oil salesman with the New York office of the Crew Levick Company. Surprising to relate, I have not yet found much direct application of the principals of Chemical Engineering in my work. This may account for some of my present enthusiasm. One acquaintance I did meet was our old friend, Viscosity, but he didn't seem quite the same; instead of being all tied up with D U S, he is just plain Vis in this business.

I have seen Dave Minton several times during the past week, and on no occasion was it at the Plaza! I make a point of this for two reasons. In the first place, to clear my own fair name; and in the second place, because Dave told me to. He has just returned from two weeks in Kentucky and I believe he is in a position now to give an accurate description of just what Heaven will be like. He claims that all the angels will be blondes—and who can prove that he is wrong? Besides, who wants to?

There was a smoker last night down at the Tech Club for the purpose of "whooping up" the coming New York performance of the show. There were four representatives of 1922 Course X there: Schulman, Silverman, Minton and your correspondent. Schulman claims he is collecting chemistry, engineering data and dust for the Stein-Hall Co. of Long Island City. Sounds like Research to me. Silverman is in charge of the laboratory of the Nitrate Agencies Co. at Bayonne, N. J. It will be of interest to his classmates to know that his family name has recently been changed to Montel.

During this past month I received a letter from Wally Dibble. It was a real, newsy letter and it did my heart good to hear from him. He has been in Bristol since the middle of September, working in the laboratory of the National India Rubber Co., a part of the U. S. Rubber Co. His address is 881 Hope St., Bristol, R. I. He had been to the Musical Clubs' concert at Fall River several weeks ago and saw a gang of the boys there. He says that Tom Shepard and Kirley are working in Fall River at the New England Oil Refinery.

C. D. Sullivan is doing Research for The National Carbon Co., at Cleveland. I got this pithy bit of news from our own Os True last December; my informant even went so far as to say that the work had something to do with Rate of Settling. When Os shipped me that information, he was in the middle of bidding one No Trump on a seventeen count, so you can take it for what it is worth.

Brod Haskell is another of our X-A gang who has decided to start carving his niche in the Hall of Fame now instead of—later. He is working with the Franklin Railway Supply Co. of New York City. At present he is acting as a service Engineer out on the railroad.

Misfortune has overtaken one member of our course. We knew that it had to occur sooner or later, but that knowledge didn't lessen the force of the blow when it finally fell. I am referring to the case of Julian Bonsall McFarland, alias Emulsion No. 1. You see, Mac has had a job lined up for several months, that is, he had not actually reported for duty, but he was subject to call any day. And in the meanwhile, Mac has been enjoying life in and around West Chester, Pa., with occasional trips to Gawd's Country. I mean the Pennsylvania coal regions. Then just a week or so before Xmas when things were at their height, the call came and nipped his little vacation in the bud, so to speak. There is only one way to look at those things, Mac, and that is with the sublime spirit of resignation. "C'est la vie." I am not certain of the exact name of the firm for which Mac is working, but hope to have it by next time.

Every time I write up these notes I have a guilty feeling that I am slighting Course V. I realize just how little space I have been giving to members of that course, but that is my misfortune rather than my fault. I have heard nothing from or of any of them for what seems to me like months; kick thru, some of you chemists, with a letter or two, won't you?

Course XI

FRANCIS J. LAVERTY, *Secretary*
1409 E. 53rd Street, Chicago, Ill.

Better late than never. News is as scarce as "H's" since both my correspondents have failed me, so use this:

"Another good man gone wrong. Bill Wise has went and got himself a wife. I haven't been able to find her name, but will."

As the only faithful correspondent, Warren Howland, sends this: "I received your favor of a long time ago and further heard from you via the Review for both of which I am indebted. I cannot, however, pay you in news or anything else very interesting unless it be news that at last I am not too lazy to get off a line to you."

"I met Jim Stalbird the other day in a restaurant down town. Still with the State Department, working on a Tannery waste river pollution job, near here somewhere. He likes it very well, though it doesn't give him much chance for his daily dozen."

"Hal Wilbur sends some sand, mud and other detritus of that nature up here to the laboratory, which I see once in awhile. Haven't seen him since July. I guess he is on a big and interesting piece of work."

"The rest I heard of only through you. I remain about the same as usual. Finished up the Brockton job pretty well and now I am on all sorts of work, which has the advantage of variety at least."

"Kid Zack has been in charge of the Tannery Testing Station of the district here, and from latest reports the place is nearly wrecked. (Intentional, of course.)"

"I met Archie Wilks last Sunday. He has been in Chicago since early December as a structural engineer with the Western Electric."

The honorable Secretary visited the old camp grounds during Christmas week in time to file his registration material under the latest system. Of course, Tech was one of the places which I seemed to recognize.

Our course has one more issue of the Review to make. What say, then, boys, how about a little 100 per cent?

Course XV

R. H. BROWN, *Secretary*
75 Glen Road, Jamaica Plain, Mass.

Since my last spasm in these columns, fate has certainly been kind enough to give me plenty of work to do. In one respect, however, I have not been overworked, and that is in answering notes from you fellows. This is partly my own fault, for other than through these columns I have not yet written to all of you.

Ordinarily, I find time to visit Professor Schell and obtain some up-to-date dope to help fill up this space, but this month I haven't even had a chance to do that, and so the other day when I had occasion to be at the Institute for several hours on company business, a gripping fear possessed me that I might run across Big Chief Hodgins. So I sneaked along through the corridors with my coat collar up, praying for the best, but cautiously glancing this way and that, especially as I passed the doors near room 3-207. Just as I thought I was out of danger and was breathing more easily, a door opened suddenly and out stepped a nimble figure—O horrors! it was he. I knew it, although I couldn't see him distinctly. My attention was just then bent on examining the upper portions of the corridor walls. For several seconds the silence was terrible, until a sweet voice shouted, "Ah there, Brownie, got your March thesis ready for me?" "Why, Eric," I replied, surprised like, "is that you? Lucky you spoke or I shouldn't have seen you. I am sorry to say that most of the gang have been too busy to write lately, holiday pastimes and other forms of excitement other than business, you know. They are all doing very well, though. I received a few very fine letters, but probably you would rather have me wait until the May issue when I expect to have more to report." "Oh, no," he said, "sling a line about not having anything to write about—and then make up two or three pages out of the letters you have received. That will be good enough for this month."

Well, I simply cannot sling a line, so I shall not attempt to, but I will quote from the letters I have received. First of all, I will give a few notices which, through lack of space, could not appear in the January number.—The engagement of Miss Cornelia Bulford North to Sam Leland of Wellesley Hills, Mass., has been announced. Miss North is a popular student at Wellesley, Class of 1924.—Little Littlefield is employed as an investigator in the training course of Liberty Mutual Fire Insurance Company of Boston.—Jule Lovejoy is learning the ins and outs of fire insurance inspecting with the Underwriters' Bureau of Boston. His engagement has also been announced.—Bob Lund is said to be working for his father in the shoe business in St. Louis.—L. McKenzie is junior engineer and statistician in the Statistical Branch of the Budget Department of Henry L. Doherty & Co., New York.—Billy McMahon is carpenter's apprentice for a local construction company. His home address is 6 Walker Place, Atlantic, Mass.—"On Oct. 28, 1922, Mr. and Mrs. Franklin Charles Henderson of Brookline announced the engagement of their daughter, Miss Louise Maes Henderson, to Charles Wesley Manville of Boston. Miss Henderson is a graduate of the Gateway School in New Haven and is now attending Simmons College."

Now for the letters. The first is from Hugh Shirey who, as you remember, is getting sales experience in the employ of the Eastman Kodak Company. In December, he was transferred from Rochester to Chicago, where his present address is 133 N. Wabash Avenue. He writes as follows:—"I have just finished reading from cover to cover the December Review, and it is needless to say that all of it was enjoyed. Already, I am looking for the next issue. The Eastman Kodak Company owns stock houses (retail stores) in various parts of the country, the one here being called Sweet Wallach & Company. I was transferred here just three weeks ago for an indefinite or rather unknown period of time to do anything there is to be done. However, the main purpose is for me to get sales experience, for eventually I shall be in the sales department. I like it very much and learn something all the time. So far, I have attended two of the Tech Club luncheons at the Engineers' Club and each time have found new '22 men. Also, I have run into some, among the several millions of people here. Art Meling is with an engineering firm at 225 N. Michigan Avenue; Joel Harvey is with the Belden Mfg. Co., and lives at 521 Barry Avenue; Baldrige, Ex-'22, recently came here and is in the advertising game. He can be reached at Delta Tau Delta House, Northwestern, Evanston, Illinois. Westcott, an XV man, is also here; Louis Nelsø, Ex-'23, is with an engineering firm; Johnny Goodnow is here, but I don't know his address; Kelly is at 625 W. Jackson Avenue; Chuck Brokaw from St. Louis, gets here about every two weeks, so I hope to see him soon; Chuck Springer, Ex-'23,

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1922 Continued

will be here for Xmas, he is with Chicago Bridge & Iron Works, Bristow, Oklahoma." . . . That's what I call a good letter.

Rex Hall writes from 17 Upper Mountain Ave., Montclair, N. J.:—"You may be interested to know that I am now connected with the New York Telephone Company in their Traffic Department. At the present time, I have no particular rating, but as soon as that is supplied, which will be in the matter of three months or so, I shall make it a point to send you my business address for your records. Will you please remember me to any of the gang you may see in Boston."

We have another letter from Finn Borchgrevink of far-off Norway, who says:—"It is a long time since you heard from me, and quite a few things have happened, too. Mr. Juel, XV, '21, and Mr. Henrikssen, '22, have joined the same company I am in; the former is in the export department and the latter is going to run a sales-service department which we have just organized. Three XV men in the same company! If that does not mean prosperity for the company, the fault is not Professor Schell's. As for me, I have got two increases in my salary, which is pretty good, everything taken into consideration. I am still assistant to the sales manager and my work is quite as interesting as it promised to be when I entered last fall. My market analysis is coming along pretty well and I hope to have a quota system all ready for use by next spring. Sometime ago I made a report on sales conferences and set up a program for one in our own company. It was held last week and was quite a success. About forty persons attended the conference, which lasted three days and ended with a first-rate dinner at the best hotel in town. The company has decided to have a similar meeting next year, and I am already busy gathering criticisms of this one and suggestions for the next one while the impressions are still fresh in the minds of the salesmen. I am looking forward to February 1st,

when Henrikssen will join us. We expect to do a bit of team work. And besides that, competition won't do any harm. By the way, couldn't the Five hundred organization once in awhile publish a list of the latest books concerning management engineering? To the foreigners, at least, it would be of great service. It is pretty hard for us to keep up with the latest developments in America; the monthly magazines are not and cannot be broad enough to cover the whole field. I should think such a list would be of some help to you Americans, too."

Thellefsen's interesting letter is as follows:—"I do not want to start the new year till I have done my duty and have written you a few words telling you what I am doing and what I have done so far. In fact, it is not much. I have read in the Review that I am working with my father and so far the Review is right, but I am not in the electrical business; that is about the only business that I am not in. We have one insurance department, one machine department and one "Agency" department, in which we deal with almost everything that can be dealt with. This department and the machine department are the places where I am trying to earn my living. I am, for instance, selling Kolynos dental cream, making advertising campaigns, advertising in the newspapers, writing letters to all the dentists and physicians, etc., according to the lines laid out in Business Management lectures. Most of the lines are laid out from the Company in New Haven, however, so the work is really not as interesting as it should be. Besides this, I am doing all the English correspondence, translations, etc., but this won't last long. In February, I am going to Germany, Belgium and France to see some of the firms that we represent for Norway and to extend my knowledge in the other European languages. Then comes my time, and I am going to do something big. I will write you again as soon as anything happens, and in the meantime I wish you a happy new year."

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Mail may be addressed to a Box Number in care of this magazine and will be promptly forwarded to the Advertiser. Other than this, the Review assumes no obligation. Such address counts as five words. Copy for insertion in this section must reach the Review by the 15th of the month, the magazine being on sale the 25th.

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MATURE civil engineer with large experience in irrigation construction and operation is wanted by a large development company. Must be capable of taking charge of all irrigation matters in the field. Hydraulic or construction experience alone does not qualify. Address TECHNOLOGY REVIEW, Box 3006.

NEW England town contemplating reorganization of municipal affairs, is looking for a town manager. Must be capable of administering Water, Highway, Sanitary, Park and Fire departments with particular attention to economy in town expenditures. Candidates will please submit records and state salary expected. Address TECHNOLOGY REVIEW, Box 3007.

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ASSISTANT manager of internationally known pharmaceutical firm desires better opportunity; age 35; American; graduate Massachusetts Institute of Technology; qualifications cover chemistry, production, labor, sales, credit, purchasing and executive control; experience in U. S. A., England and Europe; present salary \$10,000. Address TECHNOLOGY REVIEW, Box 2033.

ENGINEERING graduate thirty years of age with a wide experience in managerial lines seeks a connection as assistant to the general manager of a manufacturing business. Will be available very soon. Address TECHNOLOGY REVIEW, Box 2031.

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MANUFACTURER'S Representative: Technology man, trained as mechanical engineer, with several years' experience selling engineering equipment, wants engagement with a manufacturer as New England representative. Prefers connection with a firm whose product is partially established in this territory and requires energetic sales management for its full development. Address TECHNOLOGY REVIEW, Box 2026.

MANUFACTURING connection preferably on a profit sharing or perhaps investment basis, is desired by an executive who has obtained real and successful results on responsible management position. Institute graduate with eleven years of broad engineering, industrial, sales, and general business experience. Have been with one fair sized concern for past six years, last two and a half years as General Manager, in full charge of manufacturing and sales. For full details address TECHNOLOGY REVIEW, Box 2035.

MASSACHUSETTS Institute Technology man wishes temporary or permanent position as industrial engineer. Ten years' experience covering diversified lines. Will furnish proof of highly satisfactory results obtained. Address TECHNOLOGY REVIEW, Box 2030.

POSITION wanted with good chance for advancement, by man of 30, preferably with small coming concern. Technology alumnus; two years' experience in construction engineering; five years' practical electrical work with large companies. Chance to get ahead of greater importance than present salary. Best of references. Address TECHNOLOGY REVIEW, Box 2013.

SALES Engineer, graduate M. I. T., 1916, wishes to make a change. Five years' experience selling and contracting fabricated steel in New England. Also general business training. Location, New York City. Address TECHNOLOGY REVIEW, Box 2028.

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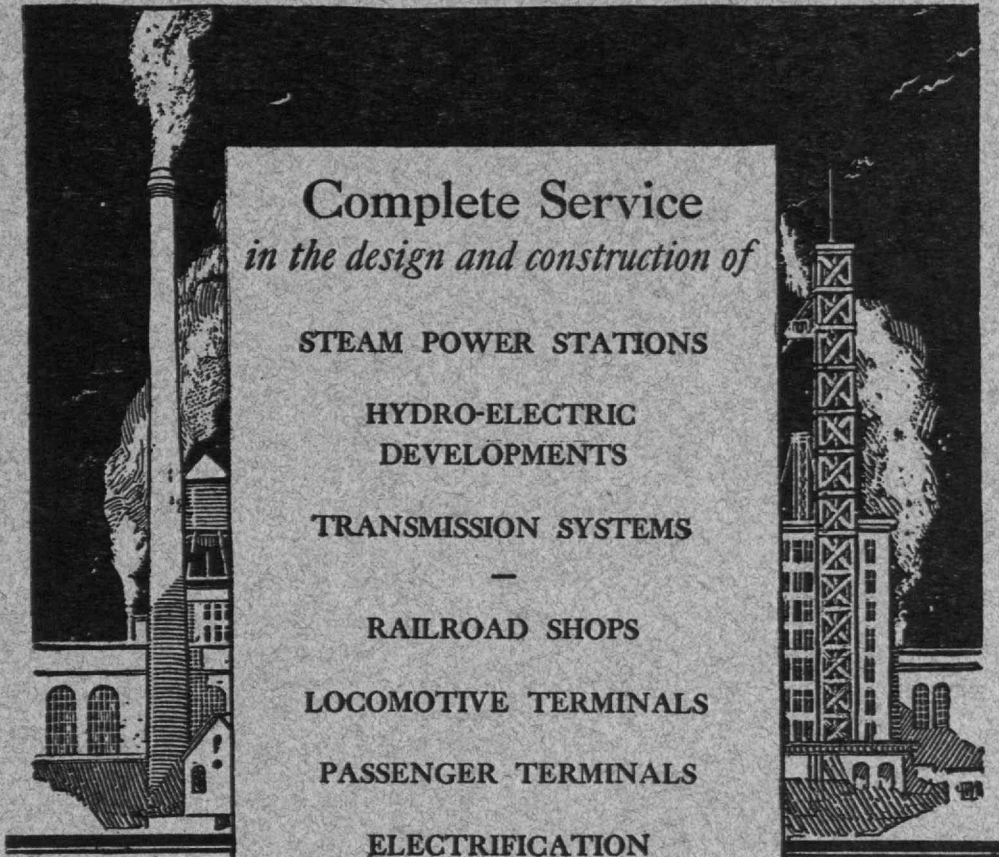
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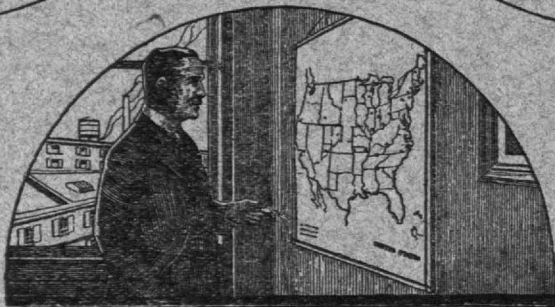
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